

GAZETTEER OF INDIA
TAMIL NADU
PUDUKKOTTAI



सत्यमेव जयते



TAMIL NADU DISTRICT GAZETTEERS

PUDUKKOTTAI

By

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வாய்மையே வெல்லும்



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FOREWORD

Gazetteers are important and authentic reference works, throwing light on history, geography, political and economic developments, flora and fauna, social and cultural life of the people. Publication of up-to-date gazetteers for all districts of the State, reconstructing all the available and latest historical material and dealing with modern developments on all fronts, especially in the pre- and post-Independence era, is an exacting and yet fascinating task of considerable historical value. The Tamil Nadu Archives has done well to bring out this gazetteer on Pudukkottai district which has an individuality of its own as a princely State at one time, and as a district of Tamil Nadu now, joining the main stream of national life since its merger with India in 1948.

In this volume, a full history of Pudukkottai and its people, which is inseparable from the history of South India, is given. The detailed chapters on different subjects provide a succinct and successive narrative of the all-round development of the district as part of Tamil Nadu. The last chapter on 'Places of Interest' reminds us of our precious cultural heritage and supplies interesting and valuable information on diverse antiquities available in this district—epigraphs, monuments, sculpture and paintings—influenced by several dynasties that had ruled this region.

This volume, I am sure, will be welcomed by historians and students of history alike, as well as administrators and planners.

RAJ BHAVAN,
MADRAS-600 022,
Dated 29th March 1983.

S. L. KHURANA.

PREFACE

The *Oxford English Dictionary* says under 'gazetteer':
"gazetteer, n. Geographical dictionary. (socalled as first provided for gazette'-writers, earlier sense of)".

As the entry suggests, gazetteers were originally intended to serve as reference works giving, with lexical brevity, the names, extents, history, physical features and related vital statistics of places in an area or district. Their scope has, in fact, proved to be wider. "Unsphinx this riddle for me, for my shelves have no gazetteer", wrote Charles Lamb². Gazetteers, since the days of Hamilton's *East India Gazetteer* (1815) and Thornton's multi-edition series beginning in 1844, and the monumental *Imperial Gazetteer of India* volumes inaugurated in 1881, have come to be valued for an ability to introduce the reader to an area's life by giving him a picture each segment of which, while it can be studied separately, points and contributes to the work's total theme. Gazetteers have served as biographies rather than dictionaries of places and have depicted their life-courses in the manner of an evolving narration. Their readership too has been wider than that was originally intended. In the words³ of the late Humayun Kabir, the gazetteer "serves as a guide to the administrator, a reference book for the general public, and a source of information for the specialist". The genre represents, besides, a historiographic endeavour of considerable significance.

1. A *gazette* is a periodical publication of the Government issued by authority that contains public notice. The word is perhaps derived from the Italian *Gazzetta*, a small Venetian coin which probably represented the price of such a news-sheet.

2. Charles Lamb, the celebrated British essayist, lived between the years 1775 and 1834,

3. Talk broadcast on March 3, 1965, from All India Radio Delhi.

The manuals and gazetteers of districts in the Madras Presidency were written, as elsewhere in British India, by British officers who had an intimate first-hand knowledge of the area. This specialization lent to their writing an authenticity and an immediacy. Only a person who had partaken of field-life in its varying moods could have observed as Hemingway does under 'Flora' in his *Gazetteer of the Tanjore District* (1915): "The indigenous mangoes are of poor quality, being stringy and having a pronounced flavour of turpentine....". It was after some years spent in the Tamil country that Pate could say as he does under 'People' in his *Gazetteer of the Tinnevely District* (1917): "Tamil, which is the language of nine-tenths of the population, is spoken with greater purity but with a more pronounced drawl than in the northern districts. In rustic speech consonants are often transposed—for instance, *kuthirai* becomes *kurithai*, *abaratham* becomes *abatharam*--and with all classes the letter 'v' degenerates into the equivalent of a simple 'l'. These pre-independence manuals and gazetteers were written with the quality of intuitive understanding that is best described by the tell-tale Italian word *sympatica*.

In Tamil Nadu today, the term 'pre-independence manuals and gazetteers' would refer to eleven works going under the description 'Manual' that were written between the years 1868 and 1910 covering all the present districts of the State except Madras, Kanyakumari, Dharmapuri and Pudukkottai, and seven works, going under the description 'Gazetteer' that were written between the years 1906 and 1917 covering the districts of Madurai, Thanjavur, Tiruchirappalli, the Nilgiris, South Arcot, Salem and Tirunelveli. The manuals were all in single volumes except those of North Arcot and Salem which were in two volumes each. The gazetteers, on the other hand, were multi-volumed, the first volume being narrative in form, while the subsequent ones were statistical

or tabular volumes that were revised and re-issued periodically. These books in the Madras Presidency were printed always in small numbers and never in more than a single edition. Very few copies therefore survive. And these now receive from their owners attention reserved for disappearing species of life. The library at the Tamil Nadu Archives, Madras, fortunately has a complete though brittle set.

While this body of literature was acknowledged as being precious and quite irreplaceable, it also became clear, with Independence, that the works of Nelson, Hemingway, Francis, Le Fanu, Pate and their fellow gazetteer-writers would have to be followed by editorial attempts of a similar and yet different kind. Life in the districts was changing in certain very fundamental ways for the old gazetteer pictures, howsoever arresting, to suffice. Changes, both physical and psychological, had begun to take place in the country following the transfer of power and the inauguration of programmes for development and self-government. These changes have been symbolized in a personal impression recorded¹ by Philip Mason, a former member of the Indian Civil Service who re-visited, in 1957, a district in which he had served decades ago : "A tremendous effort is being made, in about a quarter of the district, to wake up the peasants, to give them a new consciousness of all they need, to help them see for themselves how they can grow more food, clean up their villages and improve their health—in short, begin helping themselves towards a life with much greater possibilities. In those villages many people are feeling that things are better than they have ever been before. I remember with pleasure the good-natured laughter, in one of the villages with this new look, when we came

1. In the first five of talks by Philip Mason over the B.B.C. and published in *The Listener* of August 1957. Philip Mason is the author of the two-volumed *The Men Who Ruled India*, under the pen-name Philip Woodcuff.

round the corner and found one of the old kind of wells, the rim almost flush with the ground, so that dust and even dirty water could get in. 'An old-fashioned well', the village headman said apologetically, 'the kind we used to have in your day'. Everyone laughed—but it was friendly laughter—at him for dropping a brick, at me because of the truth in it."

It was imperative that this new mood be recorded and described in accounts of life in the districts today. A new set of gazetteers was now required—a set that would not replace but succeed the older set. The post-independence Governments of Bombay, West Bengal, Bihar, Madras, Rajasthan and Uttar Pradesh were the first States that brought out volumes of 'revised' district gazetteers'. The work in Madras was undertaken by the late Dr. B.S. Baliga, then Curator of the Madras Record Office (now re-named Tamil Nadu Archives). His volume on Thanjavur (1957) and the ones which he drafted but which appeared posthumously—Madurai (1960), South Arcot (1962) and Coimbatore (1965)—are notable for their methodicality and thoroughness. This lead taken by State Governments was consolidated by the Government of India into an All-India scheme whereby the old 'Indian Empire' volumes would be followed-up by a new 'Gazetteer of India' series, while the States would bring out new district gazetteers along the lines of a prescribed framework. This new format for district gazetteers was designed to include an enlarged treatment of the economic life of the people and the impact of administration on them. A Gazetteer Unit was constituted in the Madras Record Office in 1961 and was headed by Dr. A. Ramaswami from 1961 to 1968 and by Thiru N. Amirthalingam from 1970 to 1974. Gazetteers for all the districts of the State not covered in the Baliga series were compiled in this period, those actually published being the *Salem Gazetteer* (1967) and the *Ramanathapuram Gazetteer* (1973). In October 1974 the Government of Tamil Nadu placed the Gazetteer Unit under the

administrative control of the Commissioner of Tamil Nadu Archives and Historical Research and, simultaneously, ordered the preparation of gazetteers for the new districts of Dharmapuri (f. 1968) and Pudukkottai (f. 1974).

The *Pudukkottai Gazetteer*, work on preparing which commenced in the November of 1974 and ended in the November of 1975, has tried, though not with entire success, to adhere to the purpose and method of gazetteer-writing indicated¹ by Thiru Badrinath, I.A.S., Commissioner of Tamil Nadu Archives and Historical Research from February 1973 to May 1975. "A gazetteer should," he postulated, "give a connected account of the life of the people of that district—their history, their physical environment, their social traditions, the economic activities by which they live, the literature through which they express their sensibility, the festivals through which they express their relationship with nature, the institutions that govern them, and their struggles, and the changes they have as a people undergone periodically." The main point to be borne in mind was, the former Commissioner observed, that the new gazetteers should not become a mechanical catalogue of facts but should be able to describe life in the district in a connected account.

Historically, the Pudukkottai tract was the meeting ground of the boundaries of the famous Tamil kingdoms (the Pallava, Chola, and Pandya) and, later, of the Vijayanagar empire. It has been, consequently, a land of battles and battlements. But if it suffered from an excess of the 'rush of horses and waving of flags', its buffer location also led to the area's benefiting from the cultural traditions of the early kingdoms. In its small area, Pudukkottai has a collection of the main representative styles of south Indian architecture. The Pallava, Chola, Pandya and Vijayanagar styles are all present here—not, to be sure, at

¹ In a note submitted to the Government of Tamil Nadu, dated 7th August, 1974,

their absolute best but at optimal levels of excellence. It is almost as if Pudukkottai presented an open ground to all these dynastic styles for experimentation, demonstration, and an almost competitive display. An account of various sites of archaeological interest in the district is given in Chapter XIX. The buffer status enjoyed by Pudukkottai led, in time, to its crystallizing into an independent State. The adventitious beginnings of Tondaiman Raj in Pudukkottai, its determining role in the consolidation of British rule, and its becoming the only Tamil 'native' State to sign the instruments of accession in 1948 are described in Chapter II.

Pudukkottai's diverse topography, interesting but fast-disappearing flora and fauna, its distinctive social groups, the brave tilts of its farm community against nature's indifference and even hostility, its industrial aspirations and endeavours all form the chronicle and concern of this book. In its preparation no single agency has been of greater help than *A General History of the Pudukkottai State* written in 1916 by the Pudukkottai-born mathematician and scholar S. Radhakrishna Aiyar. Mention must also be made of this book's indebtedness to the three-volume *A Manual of Pudukkottai State* written in the years 1938-1944 by K. R. Venkatarama Ayyar under the supervision of that outstanding civilian, Sir Alexander Tottenham, Administrator and Diwan of Pudukkottai State from 1934 to 1946.

Records of the erstwhile Pudukkottai darbar now housed in the office of the Revenue Divisional Officer, Pudukkottai; the Government of Madras papers at the Tamil Nadu Archives, Madras; related documents at the National Archives, New Delhi; and micro-filmed copies of *The Hindu* in that newspaper's office at Madras, have been consulted by the Gazetteer Unit with profit. Much of the information obtained from these records such as

those for instance, relating to the droughts and drought-relief in the Pudukkottai tract in the nineteenth and twentieth centuries, the administration of Sashiah Sastri (Diwan and Diwan-Regent of Pudukkottai State from 1878 to 1894) and the Pudukkottai darbar's attitude to Indian nationalism, is being presented to the reading public now for the first time. We would like to record our gratitude to the custodians of these records for enabling us to refer to them.

The range and importance of subjects that are dealt with in a gazetteer are so wide and great that it became essential for us to consult experts, official and non-official. While our gratitude to all these specialists has been recorded in the relevant chapters, our grateful thanks are due specifically to Dr. Salim Ali and his associates of the Bombay Natural History Society ; Dr. B. G. L. Swamy, visiting Professor of Botany, Presidency College, Madras ; and Thiru R. Whitaker and his colleagues of the Snake Park Trust, Guindy, for contributing portions related to their branches of study in Chapter I. Invaluable assistance was received by the loan of records and conversational strike-a-lights from Thiru Rajagopala Tondaiman, the last Raja of Pudukkottai, his brother Thiru Radhakrishna Tondaiman and Tmt. Rema Tondaiman, as also other members of the former ruling family. We are immensely grateful to them.

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The scrutiny of the draft of this volume was, however, done not by the Central Gazetteer Unit but by a special appraisal Committee, constituted by the Government of Tamil Nadu in May, 1976. This Committee consisted of Thiru S. Viswanathan, I.A.S., (First Member, Board of Revenue), Dr. K. K. Pillay (Historian), Thiru K. Nagarajan (Pudukkottai born-writer and advocate)

and Thiru L. M. Vasagam, I.A.S., (Commissioner of Tamil Nadu Archives and Historical Research). The Committee made many useful suggestions which have improved the quality of the narration, for which we are beholden.

Without the team-work of the Research Assistants, administrative and typographic staff of the Gazetteer Unit, as also the other officers and personnel of the Tamil Nadu Archives, the *Pudukkottai Gazetteer* would have been an impossibility. To each and every one of them are tendered our grateful thanks.

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Editor Gazetteers
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L. M. Vasagam

Commissioner of Tamil Nadu Archives and
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<i>Author/Publisher</i>	<i>Name of the book.</i>
Dr. Dharma Kumar	<i>Land and Caste in South India</i> (1965).
Prof. Romila Thapar Penguin Books Ltd.	<i>A History of India</i> by Romila Thapar— Volume I (1966).
Dr. Sarada Raju	Paper read at the Seminar on the Agrarian History of Tamil Nadu—1750-1947 (held on 23rd October 1974 at Madras).
George Allen and Unwin Ltd. ..	<i>Indian Administration</i> by Asok Chanda (1958).
People's Publishing House Private Ltd.	<i>Evolution of Agrarian Relations in India</i> by Bhowani Sen (1962).
University of Madras	<i>South India and Ceylon</i> by Dr. K. K. Pillay (1963).



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PUDUKKOTTAI DISTRICT GAZETTEER

CHAPTER I—GENERAL.

Five princely States were, in British times, under the control of the Governor of Madras. Of these, Pudukkottai is the only one to remain within the boundaries of Tamil Nadu today. The Pudukkottai State merged with the Indian Union in 1948 becoming one of the revenue divisions comprising the new Tiruchirappalli district. The division acquired on the 14th of January, 1974, the stature of a separate district—Tamil Nadu's fifteenth. This return to a full-fledged identity was regarded as the 'fulfilment of a cherished ideal'.

What are the essential features of this territory? Pudukkottai's earth, which sustains and shapes its life, is dry for most part of the year. Rocky outcrops and thorny scrub form its surface: logical complements of an under-nourished soil. The district has no rivers worth the name. The tanks and streams that form its irrigation system are called 'rain-fed' because they are unconnected to any source of water supply other than the clouds. But monsoons being what they are, the tanks are in actual fact more rain-starved than rain-fed.

But even on this rather inhospitable terrain, life has moved with a steady rhythm. The soil has supported the husbandry of dry crops. The district's profusion of granite, gneisses and ochres has led in the past to a flowering of art and sculpture. Its native scrub has lent concealment therefore, perpetuation to species of life peculiar to such tracts. Its tanks have served as transit waters for migratory birds.

NATIVITY.

Origins of the District.—The geopolitical origins of Pudukkottai lie in the medieval history of peninsular India. They are to be discerned in a riparian tract where, after the decline of the power of the Pallavas, the territories of the newly configured Chola and Pandya kingdoms met. The Chola domain beginning from Nellore in the north ended on the banks of a river called Vellaru. The Pandya country began where the Chola ended. The Vellaru formed, thus, a natural boundary between the Chola and Pandya territories. Of the tract watered by this river, it has been observed¹ “. . . in early times beginning from at least the second century of the Christian era down to the ninth it played an important role as the junction of the various rival dynasties which bade for supremacy in the south”. Its intermediate situation prepared the tract for acquiring, in time, an independent identity.

Ancestors of Vellala ploughmen—the leading agricultural community of south India even today—settled down in this tract over the centuries and husbanded it. The farms immediately north of the river in course of time came to be called konadu (கோனாடு) or ‘the king’s country’ while the tenacious earth with its wild underwood to the river’s south was designated kanadu (காணாடு) or ‘the forest country’. In this tract of cultivated and wild lands, the Vellalas were joined by immigrants coming from, it is believed the Tondaimandalam². The

¹ M. Arokiaswami in *The Early History of the Vellar Basin* (1954) ; page 2.

Also see *The Oxford History of India*, Vincent A. Smith, 1964 (Third edition) Pages 220-221.

Though natural, the boundary was tenuous. S. Radhakrishna Aiyar, author of *A General History of the Pudukkottai State*, 1916 observes : “The river Vellar formed the traditional boundary of the Pandya and Chola kingdoms, though the whole tract was often under the rule of the Cholas and occasionally under the sway of the Pandyas”.

² The Tondaimandalam was the Pallava country—a region extending to about 100 miles north-west of Madras, comprising areas now in the Chengalpattu and North Arcot districts of Tamil Nadu, and the Chittoor district of Andhra Pradesh.

Akananuru, the ancient Tamil classic, describes these and other activities of the Kallars of Tondaimandalam (poems 62, 83, 209, 311, 342, 359, 393).

According to W. Francis (*Madras Census Report*, 1901), “The Chola court or Tanjore, seems to have been the original abode of the Kallars before their migration to the Pandya kingdom. . . . in about the eleventh century A.D.”

For a fuller treatment of the history of the region see Chapter II, and of Vellalas and Kallars, see Chapter III.

migration is held to have taken place sometime between the eleventh and the thirteenth centuries. These were the progenitors of the community that came later to be called 'Kallar'. It must, however, be stated that the evidence to substantiate the Kallars' arrival from the Tondaimandalam in this manner should, ideally, have been stronger than it is. The possibility cannot be ruled out that the original Kallars did not migrate into this region and that they were just a denomination of the Vellalas that acquired, over the years, distinct sociological characteristics.

Be that as it may, these men were soon to be in effective control of the area. Adept in capturing elephants and trading their tusks, many of these strong limbed Kallars found their way to becoming the security forces of local chiefs.

With the waning of the Pandya-Chola configuration in the fifteenth century, this tract of farms, river and forests passed into Nayak hands. An opportunity was now to present itself to the Kallars of this region to rise from the status of guards and local 'strong' men to that of chiefs in their own right. We are informed by the *Tondaiman Vamsavali*¹ that Sriranga Rayalu, a Vijayanagar prince visited the area in the seventeenth century. An elephant in his retinue went out of control causing great havoc. An enterprising Kallar by the name of Avadai Raghunatha Tondaiman subdued the pachyderm and conducted it to Sriranga Rayalu. The prince was impressed by this act of daring and conferred on Avadai Tondaiman the title of 'Raya' and granted, among other favours, a piece of land². The grant can be regarded as the seed of the Pudukkottai State, and the title can be regarded as the inauguration of Kallar aristocracy. Raya Tondaiman's sons Raghunatha and Namana

¹ The *Tondaiman Vamsavali* is a poem in Telugu written around 1750 A.D. by a court poet, Venkanna. The prince referred to is, apparently Sriranga Raya III who ruled from 1639 to 1668.

R. Sathianathier says in *Tamilaham in the 17th Century* (1956) : "....he (Sriranga III) was the third son of the younger brother of Venkata II and lived upto 1672 "

² S. Radhakrishna Aiyar describes the episode in detail on pages 118-122 of *A General History of the Pudukkottai State* (1916)

added more lands to their father's acquisition, the most significant of which was a tract south of the Vellaru sliced out of the palayam¹ of the Pallavarayars.² Raghunatha, formally installed in 1686, is recognised as the first raja in the line of the Pudukkottai Tondaimans. He is styled in references subsequent to the installation as Raghunatha Raya Tondaiman. By the middle of the eighteenth century the Pudukkottai State had acquired a spatial and political identity which was preserved intact throughout the tempestuous decades that saw Muslim and Maratha thrusts at Tiruchirappalli, Madurai and Tanjore, and the Tondaiman's own clashes with the neighbouring rulers of Tanjore and Madurai and local polygars. The state's geographic integrity remained basically undisturbed thereafter.

The three taluks of Kulattur, Alangudi and Tirumayam comprising about one thousand square miles came to be known and respected in British India as the 'Tondaiman's country'⁴. Britain's power in India, was extended directly over three fifths of the sub-continent alone.. This was 'British' India, lying spreadeagled from Sind in the west to Assam in the east, and from Punjab in the north to Madras in the south—a vast territory acquired over the years since Plassey by a combination of military and political annexations. Over the remaining two-fifths British control was indirect. This was 'Indian' India consisting of 562 'Native' States divided from the other India by no natural frontiers but by cadastrally drawn political boundaries. Part of this group was the 'Tondaiman's country'.

¹ *Palayam* is the territory under a *palayakar*. The words have been anglicized into 'pollem' and 'polygar'.

² See Chapter II.

³ See under Etymology of the Name, Chapter I.

⁴ What must be one of the earliest references to the region as 'Tondaiman's country' in British Indian records is found in a letter from Ramah Naick, an agent of the East India Company at Tanjore, dated 11th January, 1754 addressed to the Madras Presidency (No.36 in the Records of Fort St. George, Country Correspondence, Military Department 1754). The description serves to establish both the relative freedom of the tract from outside control as well as the supremacy of the Tondaiman ruler in it. The term, apparently, had greater currency than 'Pudukkottai' until about the middle of the nineteenth century although the reference to 'Pudukkottai' in the map described under Etymology of the Name, Chapter I, predates this letter.

Bilateral agreements had been concluded by the British Government whereby the princes recognized the paramountcy of the Crown, without their territories becoming British territories or their people becoming British subjects. Their external affairs were, under the arrangement, to be managed entirely by the British Government. Their domestic affairs in certain respects and under certain conditions could also be controlled by the representatives of the British Government. The Governor of Madras performed this function in respect of five States : Travancore, Cochin, Pudukkottai, Banganapalle and Sandur. The connection of Travancore and Cochin with the British Government was regulated by treaties ; that of Banganapalle and Sandur by sanads. Pudukkottai had no specific arrangement but was regarded a State by convention—a convention strengthened, no doubt, by the Tondaiman's loyalty and service to the Raj.

The independence of India in 1947 from colonial rule was followed by the integration of these 562 States with the new nation. The Government of India's Ministry of States headed by Sardar Vallabhbhai Patel worked out procedures for the constitutional aggregation of each of these States. Travancore and Cochin with 8421½ square miles of territory, were made a separate province. Banganapalle (253 square miles) and Sandur (101 square miles) merged with the Kurnool and Bellary districts of the new Madras State. Pudukkottai, with an extent¹ of 1177 square miles consisting of the three taluks of Kulattur, Alangudi and Tirunayam, merged on the 3rd of March, 1948, becoming an administrative (revenue) division in the Tiruchirappalli district of Madras State.² With the

¹ The extents of the States are taken from the *Provincial Gazetteers of India*, Madras Volume I. The area of Pudukkottai State, is, however, recorded in the State Administration Reports for the years 1882-1883 as 1380 square miles, its extreme limits east to west being 60 miles and north to south, 45 miles. Radhakrishna Aiyar, [*A General History of Pudukkottai State* (1916) gives the extent as 1178 square miles while the Report of the Census of India 1921, for Pudukkottai State gives it as 1179 square miles.

² A State's Ministry communique released on the occasion by the Chief Secretary to the Government of Madras said : " His Highness, the Raja of Pudukkottah, discussed the question of the future of his State with Sardar Vallabhbhai Patel yesterday. Sardar Patel advised His Highness that both in the interests of the people and himself he should merge his state with Madras Province. The Raja has accepted the advice and signed the merger agreement. The administration of the State will be taken over by the Government of Madras on 3rd March, 1948."

reorganisation of the country on the basis of language in 1956, Travancore and Cochin, as predominantly Malayalam-speaking were allotted to Kerala; Sandur with a Kannada-speaking majority was absorbed in Mysore (now Karnataka); Banganapalle, a Telugu area, had already become part of Andhra Pradesh. Pudukkottai, the lone Tamil member¹ of the old group of five, was the only erst while 'State' to remain in Madras².

Although Pudukkottai was part of the same fabric of life as that in the rest of the Tamil country, there were differences. Its history of political separateness had resulted in the growth of distinct socio-economic needs. On the day after the merger Madras's premier daily *The Hindu* observed: "Its (Pudukkottai's) economic resources are exceedingly meagre; and, although owing to a succession of able and far-seeing Dewans and the earnings of the people of the State from their adventurous sons abroad, the State had been able to attain to a level of administrative efficiency comparable with that of many Indian States, further development and progress are necessarily conditioned by greater resources which, however, cannot in future be in the command of the State".

The need for development and progress was soon to generate aspirations for an administrative status in independent India that would be consistent with its earlier position. The Government of Tamil Nadu considered the possibilities of fulfilling these aspirations by giving Pudukkottai the status of a district and in 1973, asked a Member of its Board of Revenue to study the subject in detail. "Ever since Pudukkottai State was merged", wrote Thiru.S.P.Srinivasan in this study, "the local people have been clamouring for a

¹ In a letter dated 2nd July 1903, the then 'raja' of Ramnad, Bhaskara Setupati wrote to the late Raja of Pudukkottai: "Your Highness is the only Sovereign in the Tamil Country has at the present day and that language has none else to look to for its support as its Rajah. While Malayalam and Kanarese have the Rulers of Travancore, Cochine and Mysore, Tamil has Your Highness and Your Highness only for its Sovereign". (Darbar Records, Pudukkottai). Coming as it does from a scion of the once-powerful ruling family of Setupatis that had played a great part in the formation of the Pudukkottai State and the Tondaiman dynasty, this historically significant letter is not without a touch of irony. Ramnad had by this time ceased to be the power it had been, while Pudukkottai was a State.

² The name of Madras State has been changed to 'Tamil Nadu' by the *Madras State (Alteration of Name) Act, 1968*.



Pudukkottai's Public Office buildings illuminated on the day of the district's formation

—14th January, 1974.

Courtesy : District Agricultural Officer, Pudukkottai

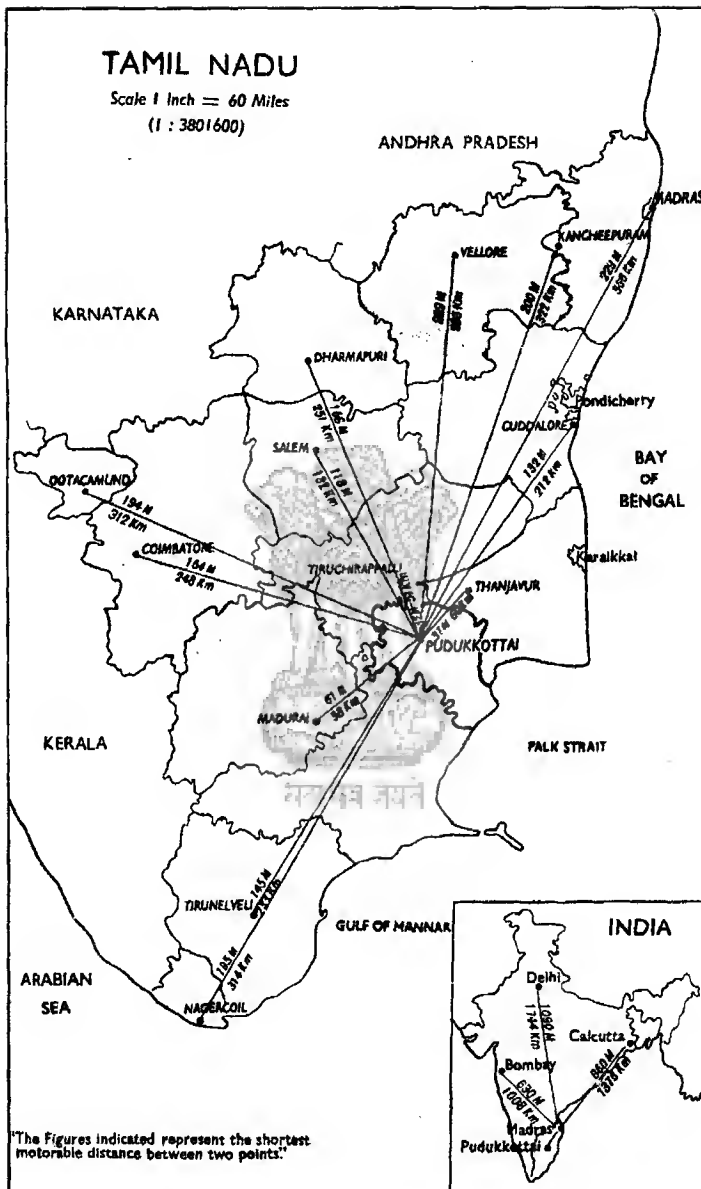
separate district with Pudukkottai as headquarters." He recommended that to the traditional Pudukkottai area be added certain neighbouring areas and the geographic unit thus created be made a new district. Pudukkottai became, accordingly, a district on the 14th of January, 1974. To the three taluks traditionally constituting Pudukkottai were added the coastal taluk of Arantangi and a few other bordering villages from the neighbouring Thanjavur district. Pudukkottai town became the district headquarters, with the old Pudukkottai sub-taluk in Alangudi taluk becoming a separate taluk.

Etymology of the name.—*Pudu* is derived from a word in Tamil meaning 'new', while *Kottai* is 'fort'.¹ *Pudukkottai*, therefore, means 'new fort'. The name is suggestive of dynastic and geographic conflicts and the founding of kingdoms on the remains of old ones. The erstwhile Pudukkottai State and the new Pudukkottai district have both borrowed the name from their principal town and headquarters. While no ancient fort exists in the town now², the remains of fortifications at Tirumayam, Kilanilai, Puram, Pillar-malai, Porpanaikottai and Varappur illustrate the toponymic evocations of the name 'pudukkottai'. According to Veerkaria's *Tondaiman Vamsavali* the present town of Pudukkottai was the creation of Raghunatha Raya Tondaiman, the founder of Pudukkottai's reigning line, after his installation in 1686. Radhakrishna Aiyar informs us [*A General History of the Pudukkottai State* (1916) page 145] that a map drawn by a Jesuit missionary in 1700 carries the name 'Pudukkottai'. He infers from this that the Tondaiman

¹ Two other place names signifying much the same as *Pudukkottai* are *Newcastle* in Northumberland, England, and *Novgorod* in the U.S.S.R., both of which still contain prominent fortifications.

² The Old Palace (built before 1813) at the centre of the town once had an outer fortification. But only a fragment now remains—a bastion. This is located at the south-west corner of the Kummandaankulam (கும்மந்தாங்குளம்) or commandant's tank, south of the Public Office buildings near the town bus stand. It has attached to it a Hanuman temple locally called the Kottai Hanumankoil or the 'Fort Hanuman Temple'.

³ The name has known some fanciful spellings during the British Raj; Poodocottah, Pcodookota, Pudukota. The Roman representation of the Tamil name comes closest to the original when spelt Pudukkottai. The consonant 'd' occurring in the name would be pronounceable as the sound in 'this' as against the sound in 'door' while the group of letters 'kottai' would be pronounceable as the words 'cot-tic' with no gap in between. For further details concerning the town see Chapter XIX.



SOURCE :- Highways and Rural Works Department.

who built up the town in 1686 must have also fortified it within about ten years of his reign. It is also possible that the fortification did not enclose the entire settlement. Radhakrishna Aiyar further holds that the fortifying wall "must have been demolished by Chanda Sahib or by Ananda Row, the Tanjore General, when he captured the town in 1734". A corroborative observation comes from the late Tamil scholar R.P. Sethu Pillai in his book on place names, *Oorum Perum* (1945) : "Raghunatha, who inaugurated the Tondaiman dynasty, built a new fort in the latter half of the seventeenth century, and named it Pudukkottai".

Position, Area and Boundaries.—The Pudukkottai of battles and battlements was a land locked territory and while the coastal strip of Arantangi now added to it had engaged Tondaiman arms, it had never before formed part of Pudukkottai.¹

With the inclusion now of Arantangi taluk in the new district, Pudukkottai becomes one of the eight districts of Tamil Nadu that enjoys a seaboard.² The Pudukkottai district lies like a starfish by the Palk Strait in the Bay of Bengal, between latitudes 9°50'—30" N and 10°44' N and longitudes 78°25'—5" E and 79°16'—3 E, its five radiating arms being the taluks of Kulattur, Pudukkottai, Alangudi, Arantangi and Tirumayam.

¹ Arantangi was a continuing source of friction in the eighteenth century between Tanjore and the Setupatis of Ramnad, each seizing and enjoying the land in turns. In 1749 Tanjore was assisted by the Tondaiman in a crucial and successful attack on Arantangi.

The Arantangi area was actively considered for inclusion in the proposed Ramnad District in 1909 by Sir William Meyer, who had been asked to propose a delimitation.

In the event, however, Arantangi has gone to neither of its traditional contenders, but to Pudukkottai.

²The lengths of their coastlines are :—

1 Madras	11 miles 2 furlongs	.. ..	18.11 Kms.
2 Pudukkottai	26 miles 3 furlongs	.. ..	42.46 Kms.
3 Kanyakumari	42 miles 4 furlongs	.. ..	68.42 Kms.
4 South Arcot	49 miles 5 furlongs	.. ..	79.70 Kms..
5 Chingleput	86 miles 6 furlongs	.. ..	139.67 Kms.
6 Tirunelveli	111 miles 2 furlongs	.. ..	179.11 Kms.
7 Thanjavur	121 miles 0 furlongs	.. ..	194.81 Kms.
8 Ramanathapuram	172 miles 5 furlongs	.. ..	277.93 Kms.

The figures have been furnished by the Central Survey Office, Madras.

³ Vol. XX of the *Imperial Gazetteer of India*, 1908, gives the positioning of Pudukkottai State as 10°—7' 10"—44' N and 78°—25' and 79°—12' E.

Radhakrishna Aiyar in *A General History of the Pudukkottai State*, 1916, places the Pudukkottai State between 10°—7' and 11°—4' and 78°—25' and 79°—12' E.

The district's area is 1795.34 square¹ miles (4,650 square kilometres). It is one of the smaller districts in the State with the Nilgiris (2,549 square kilometres), Kanyakumari (1,684 square kilometres) and Madras (128 square kilometres) alone having lesser extents.² The Pudukkottai district's population, calculated on the basis of the Census³ of 1971, is 9,47,351. Its density per square mile thus becomes 203, making it the third least crowded district in Tamil Nadu,⁴ being next to the Nilgiris (194) and Dharmapuri (174).

The district's northern and north-western frontiers separate it from Tiruchirappalli district ; its eastern and north-eastern from Thanjavur district ; its southern and south-western from Ramanathapuram district. Its south-eastern boundary is the coastline off the Bay of Bengal. This shore is the district's only natural boundary of significance. It is, besides, a State and a national boundary. The Piranmalai hill on the district's south-western

¹. The area has been furnished by the Central Survey Office, Madras⁴ with reference to its area register. The Government Order forming the district, however, gave the extent as 1792.93 square miles.

². Pudukkottai's size has, in the past, been the subject of indulgent comment. Mount Stuart Elphinstone Grant Duff, the first Governor of Madras to visit Pudukkottai described it as a "little State, somewhat smaller than two Surreys" M. E. Grant Duff : *Notes of a Diary kept chiefly in Southern India in 1881—1886*..

Writing of Alexander Loftus Tottenham's tenure as Administrator of Pudukkottai from 1934 to 1944 and Diwan from 1944 to 1946, Humphrey Trevelyan says in *The India We Left* (1972) : "He returned to South India to be Chief Minister of a little State, where he died happily in office".

Size was, in certain respects, related to political importance. F. R. Hemingway author of the *Gazetteer of the Trichinopoly District*, 1907, states: "Pudukkottai is the third in importance of the five Native States which have direct political relations with the Government of Madras". Of these States, said the Government of Madras in a letter to the Government of India in 1918, "The States of Travancore and Cochin are alone of importance and relations with them are conducted through a Resident. Pudukkottai, Banganapalle and Sandur are small States in regard to which the Collectors of the adjoining districts act in the capacity of political agents". (Tamil Nadu Archives records).

³. Since this census was conducted prior to the formation of the district, the figure of 9,47,351 has been reached by totalling the population figures of the constituent taluks as they stood in their respective districts in 1971.

⁴. The density figure per square kilometre for Tamil Nadu is 317, Madras district's being the highest among the districts (19,293).

boundary with Ramanathapuram district can also be regarded as a natural boundary, although it would be more accurately termed a natural landmark.¹

Clashes and resultant border readjustments in the past between the Tondaimans and their neighbours have led to the formation of enclaves outside Pudukkottai's main boundaries. There are, thus, the Kattathi and Kaliyiranviduthi bits in the east, and Palakkurich; in the west, which are part of Pudukkottai district but are enclosed by lands belonging to other districts².

PHYSIOGRAPHY.

Terrain:—If the peninsula below the Cauvery were to be seen in silhouetted profile from an imaginary point in the Indian Ocean—a view impossible to obtain in reality—the whole of it would appear like a floating hill. Cape Comorin, at the end point of the V-shaped peninsular landmass, would be at the front base of this hill. Bulking towards the west, the sides of this cliff would be seen sliding down towards the left and right meeting the Arabian Sea on the west and the Bay of Bengal on the east. Its western slope

1. The highest elevation point of this prominence as seen from the Survey of India map is 2,449 feet above sea level and lies in Ramanathapuram District. The boundaries of Ramanathapuram and Pudukkottai converge at Piranmalai. The hill was involved, in fact, in a boundary 'dispute' between the old Pudukkottai State and Ramanathapuram district. K. Nagarajan, author and lawyer, writes in his unpublished memoirs (1965): "On the southern frontier of Pudukkottai, within the State limits, on a hill-top (Piranmalai) there had long stood a gun, captured from the French in an action in which the Ruler of the State had supported the British arms. When Tottenham climbed up the hill, he noticed that it had shifted many hundred feet, so that it lay within the limits of the Kunrakudi *devasthanam* (roughly, diocese) in the Ramnad district. A suit was filed by the Pudukkottai *darbar* in one of the Ramnad Courts and Tottenham asked me to go into the matter and directed the Revenue Department to give me all the help I might require. We rummaged among the old records and, by great good luck, we came upon an ancient document which put the matter beyond dispute. It described the exact location of the gun. We filed the document in the Sivaganga Court and the *devasthanam* withdrew their defence and sportingly agreed to restore the gun to its original position. Tottenham was delighted but there were a few people who thought we had been fighting over a trifle".

²Embal—Irumbanadu, formerly a Pudukkottai enclave to the south of the State in Ramanathapuram district, is no longer an enclave since contiguous Arantangi has now joined the district.

would be steep and brief, its eastern more gradual and long. The outlined hill would, of course, represent the southern ghats or the range of peaks comprised in the southern Sahyadri containing the southern block of Tamil Nadu's Anamalai and Palni hills. On the east, the sides of the profile would appear to descend slowly into a series of the terraces or levels ranging, first, from foothill elevations to the plateaus and the peneplains (or the lands that are almost plains being between 250-500 feet). Thereafter, the line would descend to the young alluvial plains holding, among others, the Vellaru basin as a transition to the very young alluvial lands bordering the sea.

"The peninsula", writes O.H.K. Spate in *India and Pakistan: A General and Regional Geography* (1954), "thus consists of a great tabular block with a general slope to the east, whether it has tilted or is simply the remnant of a landmass the western half of which has subsided to form the Arabia Sea".

The hills of the southern Sahyadri range or the southern blocks of the peninsula have been described by the eminent geologist D. N. Wadia as "an ancient Archaean terrain¹". Archaeans are hard rocks which were formed between 3000 to 600 million years ago. According to Wadia, they are the "fundamental basement rocks of India composed of gneisses, schists and crystalline metamorphosed rocks" and "represent the first formed crust of the earth²". These Archaean exposures of the peninsula, reaching their high point in the summits of the Sahyadris, become less and less conspicuous along the slow incline from the ghats to the Bay of Bengal. In the gradient line from Anai Mudi (the highest nodal point of the ghats) to the sea, Archaeans cease to obtrude just before the region of peneplains.

Pudukkottai district is positioned at this level of the peneplains. It lies in the intermediate zone between the slopes of ancient rock and the coastal lands fringing the sea. The district's west partakes, therefore, of rock and its east, of the sea. Already petering out, the Archaeans in the Pudukkottai district end up in the western margins of the district's terrain.

¹ *The Making of India*, 1942.

² *The Gazetteer of India*, Volume I, (1965), page 122.

The word 'terrain' signifies, according to the *Oxford English Dictionary*, a tract of land as regarded by the physical geographer or the tactician. Bruce Foote, who conducted a geological survey of Pudukkottai and parts of Madurai, Thanjavur and Tiruchirappalli districts in 1878 answers to the former description. M. Krishnan, whose photographic expeditions in the Pudukkottai countryside in 1975 made no small demands of strategy in lens-light-object adjustment, to the latter¹. Bruce Foote's account of the terrain is found in the *Records* of the Geological Survey of India. Krishnan's are contained *en passant* in a note prepared by him on Pudukkottai's avifauna. Krishnan has recorded his perceptions of the terrain thus: "Pudukkottai (the old State area—I did not visit the strip of coast now added to this in forming the district) is a flat, broad tract of dry thorn scrub, powerfully reminiscent of the Sivaganga scrub jungle which I know well. There are a few rocky hillocks, or outcrops of rock, here and there, but the feature that distinguishes Pudukkottai from other similar tracts is the great number (several hundreds) of rainfed tanks distributed all over it, some small and some less small. In this, and to a much lesser extent in its flora, it is like the Chengalpattu district. These tanks were all dry in February 1975".

Sir William Hunter's *Imperial Gazetteer of India* written ninety years ago describes² the Pudukkottai terrain in much the same words: "The country is for the most part a flat plain, interspread with small rocky hills, some of which are crowned by old forts. In the south-west, hills and jungles are found, but elsewhere the State is well cultivated. There are 3,000 tanks, some of considerable size".

The general flatness of the terrain is its most fundamental physiographic characteristic. Dry open lands with cultivation as well as semi-barren waste lands form the basic Pudukkottai country. On the western surface of this plain emerge rocks of low and middle elevation. The scrub, once plentiful, is to be met with now in a few pockets only. The rocks and scrub are not distributed in a

¹. M. Krishnan, the Madras based naturalist and photographer, visited Pudukkottai in February, March and April 1975 to photograph temple architecture for the Gazetteer.

². Page 237 of Volume XI (Second edition), published in 1886.

uniform spread over the district, but lie in one division of it. The district's tanks, however, are ubiquitous. Streams issue from these tanks, a few of them extending their eastward journey right upto the sea.

Pudukkottai district has, thus, an eclectic topography. Despite its small size, it has something of all the physiographic divisions of the Tamil country traditionally described in literature and codified by Sethu Pillai in *Oorum Perum*. There are the Kurinji (குறிஞ்சி) or hillside lands and the Mullai (மூலை) or forest lands in the Kulattur and Tirumayam taluks; the Marudam (மருதம்) lands or plains of the Alangudi and Pudukkottai taluks; the Neidal (நெய்தல்) or coastal lands of Arantangi taluk. And there is the not infrequent, though temporary, transformation of all these categories in times of drought into Palai (பாலை) or desert lands.

This terrain is divisible into two broad portions with distinctive physical aspects—the western and the eastern. The dividing line can, for the sake of quick appreciation, be drawn north to south passing through the headquarters of the district. The lands to the west of this line comprise the greater portion of the Kulattur and Tirumayam taluks and contain the Archaean outcrops referred to. The lands on the east of the line comprise the Alangudi, Pudukkottai and Arantangi taluks and a part of Tirumayam taluk. The ground in this half is largely bereft of hard rocks. Alluvia and what can be described as soft rocks occur here. Before the addition of Arantangi taluk, the flat eastern half of Pudukkottai constituted less than half the total area of the Pudukkottai revenue division. Now it out-spreads the western.

A well-defined break in the geological continuity, or an “unconformable junction”, occurs as a line drawn north-east to south-west through the middle of the district. This geological dividing line or linear trend approximates the suggested arbitrary line passing through Pudukkottai town. On the west of the break or junction, mixed gneisses or migmatite having basic metamorphic rocks in patches are met with. These consist of amphibolites (a dark coloured rock having hornblende and plagioclase feldspar), granulite and pyroxenites (a mono-mineralic rock with or without olivine). Pink granite occurs as layers or bands in the migmatiet

Pink granite is a hard rock to which the colour is imparted by orthoclase feldspar. Quartzose, orthoclase feldspar, plagioclase feldspar, muscovite and biotite micas, hornblende, magnetite and tourmaline are the common minerals identified in the pink granite.

Calcareous gneisses and granulites are seen as small bands and lenses in the gneisses. Very small patches of crystalline limestone are seen in a few of these bands. A prominent occurrence of these calcareous gneisses bands is south-west of Viralmalai.

Charnockites, a group of rocks containing an index mineral, hypersthene, are seen as bodies of varying sizes inter bedded with the biotite gneisses and as xenoliths in the pink granites and gneisses. They vary in colour and texture from a fine grained light grey type to a coarse grained dark grey type. The variation or passage from one to the other is gradual. Prominent outcrops of these rocks are near Tirugokarnam, Rajakulattur, Ammampettai and Aranginapatti.

Hills --The district's granites and gneisses appear to the lay beholder as masses of rock surrounded at their bases by scrub, but bare near the summits. None of them would seem too high to a rock-climber, whose primary obstacle would be not the height or incline of the rock, but the thorny bushes and loose boulders. If the rock-climber were to be an ornithologist or a botanist, his ascent would be rewarding. The craggy slopes, shelters and bush-covered orifices on the flanks of the hillocks provide a sanctuary to birds of a feather partial to such terrain, while the hill's lower slopes offer hospitality to a variety of scrub flora.

The Tamil word 'malai' (மலை) means 'mountain'. A large number of place names in this western tract bear the suffix 'malai'. A few, such as Malayakkovil and Malayadipatti, carry it as a prefix. The appropriate Tamil word for the rocky outcrops that characterise west Pudukkottai would be 'kunru' (கூர்று). But 'malai' is used more commonly as a suffix (or prefix) to a specific name, irrespective of the dimensions or elevations of the hill. (Kudimiyamalai, exceptionally, was known in early times as Tirunalakunram). The more important of these hills with the diagnostic suffix to their names, include Piranmalai, the district's highest, located strategically on its south-west border with Ramanathapuram; the Narttamalai hills, a small range of pink granite gneisses lying

west of the road from Pudukkottai to Tiruchirappalli ; Aluruttimalai, a rock contiguous to Narttamalai at Ammachattram ; the Sevalur hills in Tirumayam taluk which Radhakrishna Aiyar describes¹ as "low craggy ridges covered with jungles" ; the Annavasal hill of pink granite in Kulattur taluk containing the celebrated Sittannavasal cave frescoes ; the Puram hills which are a scrub-covered groundswell in Tirumayam taluk ; Kunnattumalai and the Sempattu hills in Kulattur taluk. Apart from these, there are the minor rocks at Viralimalai, Nedungudi, Kudimiya-malai, Tirugokarnam, Vaiyapuri, Kumaramalai, Kunnandarkoil and Malayadipatti on the slopes and summits of which stand well-known temples. All these hills partake of the Archaean geological group character.

The Narttamalai range is a distension of banded pink granite with hornblende. This being a dark brown, black or green mineral its presence in the Narttamalai rock mass has, apparently, caused the basic pink to turn to what Bruce Foote has described as "pale dirty flesh colour". Weathering, which means disintegration by exposure to atmospheric changes, along the lines of the outcrop, has led to the formation of natural rock-shelters in the Narttamalai hills that harbour bats and owls. On similarly less resistant parts of the rockface, weathering has led to the formation of small tarns that hold rainwater.

Adjoining Narttamalai is the Aluruttimalai, or the 'manrolling' hill, so named after the reported practice in former times of executing criminals by hurtling them down this hill's southface. Four hundred feet high, its overhanging scarp is fiercely impressive.

The pink granite outcrop at Annavasal has been described² by Shama Futehally as "a vast lion-coloured buttress of rock overlooking rice fields". As at Narttamalai, what may have been a natural cleft on the face of the Sittannavasal hill appears to have been widened into a cave containing figures of five meditating Jainas in deep bas, and frescoes³. Another rock

¹A General History of the Pudukkottai State, 1916 ; page 4.

²"Birding in Pudukkottai ; *Newsletter for Birdwatchers*; volume XV, No. 4, April/May, 1975.

³K. R. Srinivasan, former curator of the Pudukkottai Museum and Deputy Director General of the Archaeological Survey of India, observes in a Note:

"It is not a natural cleft that has been widened or fashioned into a Cave-temple, it is totally a fresh human excavation into the vertical scarp on the western face of the massif which rises sheer above the basal spreading rock."

opening in the tract formed by the disintegration of rock along the joint planes by percolating water and other weathering agents, is the cavern on the eastern face of the buttress. Adhering to the roof of this cleft one can notice loosening sheets of granite, which on detachment will widen the joint further. The opening here is large enough for 'beds' to have been carved on the floor of this cavern which was used as a dormitory or lodging place for Jaina monks many centuries ago. There are on the flanks of the Sittannavasal rock mass several ledges and crevices (as well as a natural tunnel) intermingled with scrub. Blue Rock Pigeons, Dusky Crag Martins, Great Horned Owls and raptors find in these fissures a natural lodging, their slaty green, sooty brown and dark streaked buff coloration merging with the rock's own complexion.

The Kudimiyamalai outcrop has the same petrographical character as Narttamalai and Annavasal. A path leads to the top of the hill on which is perched a temple to Subrahmanya. Going up this path one crosses a cavern formed by nature under overhanging ledges of rock.

Viralimalai is an outcrop where the pink of the rock is noteworthy. Bruce Foote writes : "A great show of banded micaceous granite gneiss is to be seen at Viralimalai, a bold rock crowned with a temple of some note... .. The rock, banded with shades of grey and occasional black micaceous laminae, forms a stone of striking beauty".

Granite gneisses of a pale grey micaceous variety are found at Kollumalai (between Visalur and Kollukkudi) and by the Kunnandarkoil in Kulattur taluk. They are also to be encountered near Suriyur in the same taluk, and on either side of the Vellaru valley, at Perumanadu and Chittur.

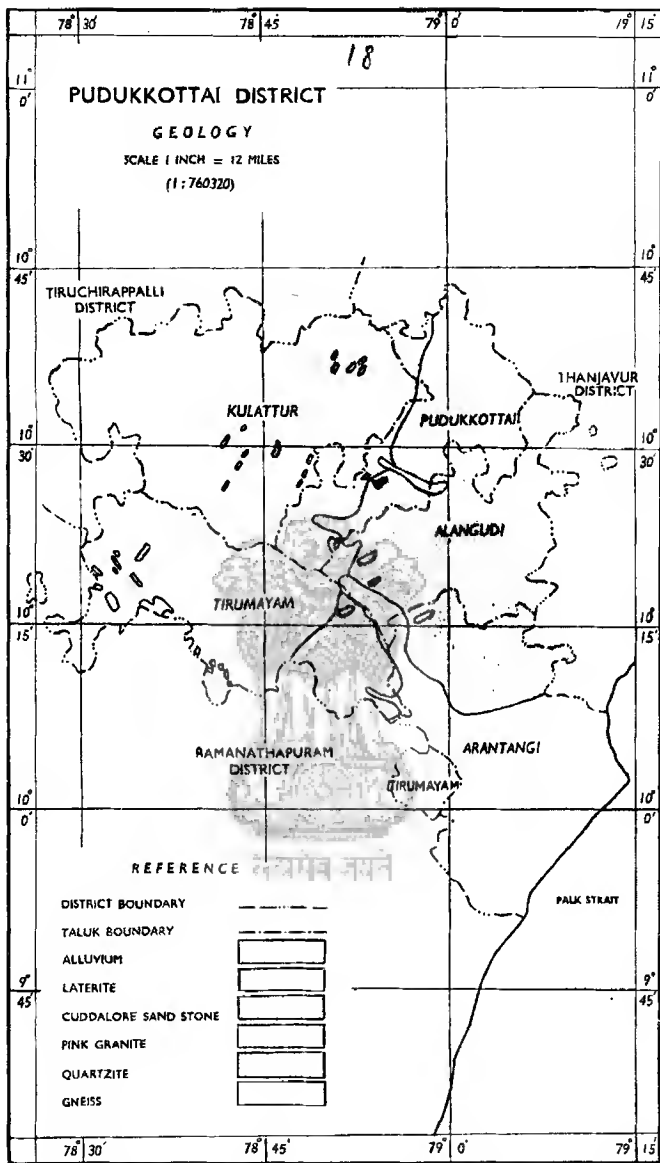
In Tirumayam taluk is the 'single peak hill' or ஒற்றை மலை of conspicuous shape and height in granite gneiss. The region at and around Tirumayam in the districts south-west consists of gneisses of pale colour, varying from pure grey to pinkish or brownish grey. Near the village Sevalur in this taluk is a craggy ridge called Sevalimalai. The highest point thereon is

942 feet above sea level and contains a Trigonometrical Survey Station. An offshoot of Sevalimalai is Kanjattimalai, with a temple to Subrahmanya adorning its cragtop.

Plains.—The Pudukkottai peneplain, studded with Archaean exposures in the forms of hills and knolls in the district's west, slopes, gently towards the flatlands, estuaries and seacoast in the east. The Archaeans, so prominent on the surface in the west, get overlain and almost completely superseded in the east by younger material of the Tertiary, Recent and sub-Recent eras. These latter rocks range in time from one to forty million years. The district's rivers, the most significant of which is the Vellaru, flow eastwards along this slope into the Arantangi surf. Partly as a result of sea incursion and partly by the action of the Vellaru, fine transported alluvial sands cover much of the coastal taluk of Arantangi or, in other words, much of the lands east of the district's geological break or junction. Coarse to fine-grained sandstone is, according to the Geological Survey of India, the predominant rock type of the district's eastern half. It is buff or pink in colour when associated with clay matter and reddish brown when associated with ferruginous matter. But since the sandstone here is capped with laterite layers five to ten feet thick, its exposures on the surface are few. Soft grits, pebble beds, conglomerates and variegated shales are found as intercalations in the sandstone. At places in the south-east of the district, the bottom beds of the sandstone and the shale intercalations have been found to contain fossils of marine lamellibranchs (*Cardium* sp. ; *Lucina* sp. ; *Dosiria* sp.) and gastropods (*Scala* sp. ; *Natica* sp. ; *Turritella* sp. ; *Voluta* sp.) as also wood (*Conifer masembrioxylon*).

The plains of east Pudukkottai consist of miles of open country, ploughed fields and tidal mudflats. Beds and margins of tanks and streams punctuate the tract.

The presence of alluvial loam on the east Pudukkottai surface makes it a poor cousin of the fertile Thanjavur delta. Agriculture is, consequently, a safer proposition here than in west Pudukkottai. For structural enterprises requiring rock materials, however, this region has had to depend on the cradles of granite in west Pudukkottai and Tiruchirappalli district. There is evidence to show



that the numerous temples that stand on Thanjavur district's rock-bereft alluvial soil obtained their rock supply from the west Pudukkottai quarries. "Without such a raw material source adequately nearby", observes K. V. Soundara Rajan,¹ "the *magnum opus* of Raia Raja I at Thanjavur would have been distinctly a doubtful proposition".

Minerals.—While the granite quarries of Pudukkottai have supplied material sophisticated enough as to be suitable for delicate temple carving, they have also met the granite requirements for sluices, calingulas or surplus weirs, and revetment of tank bunds. The quarries of Tirugokarnam, Puttambur, Tirumayam, Lambalakkudi, Konapet, Malayakovil, Peraiyur, Usilamalaipparai, Viralimalai, Vittamapatti, Kudimiyamalai, Panangudi, Ammachatram, Virappatti, Chittambur and Kiranur are noteworthy.

Laterite has been quarried traditionally near Arimalam and Kilanilai in Tirumayam taluk. The historic fort at Kilanilai, is, in fact, of laterite. Bearing low grade hydrated oxides of iron and alumina and quartz containing 10 to 15 per cent of iron, and being compact in nature, these laterites are ideal for foundations in building structures.

E. D. M. Hooper, who surveyed the wastelands and forests of Pudukkottai State in 1904, observes in his report (Darbar Records, Pudukkottai): "Originally quarrying was free subject to the masons rendering some service to Government for temples. In place of this system an annual licence costing Rs. 12 was substituted entitling the holder to work granite and laterite, and later still it was decided to levy seigniorage on the produce besides licensing the masons in the hope thereby of checking reckless and wasteful

¹K. V. Soundara Rajan, Director (Monuments) in the Archaeological Survey of India, in a note for the *Pudukkottai District Gazetteer*, dated 3rd June 1975. He further states: "...with the Pudukkottai tract (though only marginally) and the upper Cauvery valley of Tiruchi district backing the raw material supply, Chola stone structural architecture could reach high watermarks of excellence and the most extensive provenance of its realm, in the Pudukkottai district".

quarrying". Granite and laterite, like all other minor minerals, are now quarried on lease-basis, the revenues so derived being credited to the panchayat unions.

Colour clays or ochres are to be met with near the reserved forest areas near Chettipatti in Tirumayam taluk. Traditionally used for making pigments, crayons, and coloured chalk, ochres are an important raw-material today in the manufacture of distempers.

These Pudukkottai ochre deposits have been graded by the State Geological Department as 'impure'. Not exceeding one metre in thickness, the clays here are gritty in nature with low iron content. The ochres found now are mostly red in colour, with occasional pockets of yellow ochre. Only clays that are deep red or yellow can be used for colouring. These ochrous class extend over an area of about 16,000 square metres beyond which they become too light-coloured. Estimates place reserves of yellow ochres at Chettipatti (Sengirai) at about 15,000 tons of which two-thirds have been removed. The bunds of a temple tank called the Brahmakundam at Tiruvarangulam have been a traditional ochresite containing not just the red and yellow varieties but white, pink, violet and blue. Red and yellow ochres also occur in the laterite uplands north of the Pudukkottai town and are seen in the water channel (வாணி) that drains the former Machuvadi Reserve Forest to feed two tanks—Adappankulam and Pudukkulam.

According to the Geological Survey of India, tests have indicated that the existing deposits are not, however, suitable as ochres in the manufacture of paints. But they must have been more than suitable once. The renowned frescoes at Sittannavasal testify to the presence at hand of ochres of exceptional quality in the ninth century. S. Paramasivan, who chemically analysed a part of the Sittannavasal stucco for the Pudukkottai Darbar in 1938, is quoted in a Lalit Kala monograph on Sittannavasal (April 1961) as saying: "The following pigments have been employed. There is line for white, lampblack for black, ochres for yellow and red, *terre verte* for green. Thus mineral colours which are of a permanent nature have been employed".

The layers of pigment have been placed by the Sittannavasal artist on a coat of fine lime plaster, in the traditions of fresco-secco¹. It is conceivable that local material for the manufacture of lime was used. Kankar, with a low percentage of lime has been in evidence for long in various parts of the Pudukkottai tract, as at the banks of the Vellaru, and along the course of streams and in soil over Archaean rocks, at places such as Karaiyur, Perumanadu, Ammachattram, Varappur to the east of Alangudi, and Karuppu-daianpatti near Adanakkottai. Lime prepared from the kankar at the last two places has been regarded as of very good quality. The kankar occurrences are white to light pink in colour and have been described by the Geological Survey of India as being 'too siliceous'.

Alkaline earth from which bangles can be made, has been another 'mineral' found in Pudukkottai tank-beds. Nirpalani tank, the Vaittikanmoi tank at Vaittur, the Perambur tank, the bed of the Tamaraikanmoi at Tirumayam, and the banks of the Pambaru have been the traditional sources of bangle-earth. But bangles made thus have long since ceased to attract buyers. D. Narayana Rao, who was Special Officer for the Survey of Cottage Industries in the Pudukkottai State, explains the process in a Report (1929): "The earth has to be turned into block glass by mixing it with flint and heating the mixture in a furnace which has to be kept lit continuously for a number of days. The consumption of fuel is enormous in the fusion process". The unprofitableness of the business has, in fact, made the Gajulu Baliyas, the traditional alkaline earth bangle makers, to give it up decades ago.

Three small patches of white clay are found to occur near the 13/1 milestone on the Arantangi-Pudukkottai road. The chemical analysis of this clay, according to the State Geological Department,

¹ This method involves the laying of paint on dry lime plaster and adding lime-water to the pigments as a binding medium. The green *terra verte* called Kalmatam (கல்மதம்) in Tamil is to be found in small pockets in the same rock clefts at Sittannavasal. The inference can thus be drawn that the ochres and lime used at Sittannavasal may have been indigenous to the tract.

Writing in Silpa-Sri (1940-41) K. R. Srinivasan observes: "இங்கு உபயோகப் படுத்தப்பட்ட வர்ணங்கள் யாவும் கனிஜப் பொருள் (minerals) களையன்றி தாவரப்பொருள் கள் அல்ல. உபயோகப்பட்டுள்ள வர்ணங்கள் கருப்பு, பச்சை, மஞ்சள், சிச்சிலி (பீதவர்ணம்) மம், சிவப்பு, வெள்ளையாகும்".

has revealed that they are of "low refractory nature and the iron content is height". Estimated reserves of the clay are in the order of 70,000 tons. Limited quantity and poor quality make this deposit unsuitable for exploitation.

A good concentrate of ilmenite, 100 to 500 feet in length and one to five feet in width has been noticed at the mouths of nallas between Mimisal and Adiramapatnam on the Coast. Its reserves have not, however, been estimated. Similarly, mica-bearing pegmatites have been seen at Pudukkottai town but their reserves are unestimated. F.R. Hemingway informs¹ us that specimens of Pudukkottai mica were sent to the Madras Exhibition at 1903 although the reserves were not systematically mined.

Quartz or Rock Crystal (ஸ்டிக்ரம்) was found by K.R. Srinivasan to occur *in situ* in the bed of the inlet channel (வாரி) of the Viralur tank near the Siva temple. Samples collected by him (including twin crystals) were given to Sir C.V. Raman for his study on light and crystals. Milky-white quartz (வெங்கச்சங்கல்) outcrops are to be noticed in the fields to the west of the road to Viralimalai from Viralur, and in the fields on the Tiruchirappalli road beyond Nallur and again in Poyyamani and Virudapatti on the Manapparai road from Kodumbalur. This perhaps was the source of the crystal heads found in the megalithic burials of the area. The white milky variety is much in use as an abrasive and whetting material for sharpening Carpenter's tools and, in powder form, forms a necessary ingredient of the polish or marble plaster (resembling what they call Moghul plaster in the north) much used for smooth marble-like surfacing of the floor, walls and interiors of buildings—a favourite method employed in Nattukkottai Chettiar mansions.

The most interesting mineral occurrence of Pudukkottai is its modest reserve (50,000 tons) of magnetite quartzite. A thin band of this is to be found amidst the Archaean greisses near Mollambatti

¹ Gazetteer of the Trichinopoly District, 1907.

(10° 36': 78° 48') in Kulattur taluk. The iron ore content is of low grade, at an average 34 per cent. The band is to be seen in spurts or, to use the appropriate geological term, "imperisistently", over a length of about 0.8 km. As in the case of the ochres there is evidence of iron-mining in Pudukkottai in early times. A thirteenth century inscription dated the fourth regnal year of Vira Pandya (*circa* 1228 to 1272), refers to a smelt at Tiruvarangulam. It speaks of a cess of 1,200 kasus a year being collected for the right to mine iron ore, and two blacksmiths of the place being required to pay 6 kasus a year for maintaining two lamps in the temple at the place. The *Statistical Account of Pudukkottai State*, (1813) mentions other tracts where iron was found. Places enumerated in its list adjoin Andakkulam, Perungalur, Thekkadu, Kilanilai and Sengirai (apart from Tiruvarangulam).

Bruce Foote reports in his 1878 *Record*: "Only one occurrence of magnetic iron in the gneiss was met with; this was about a mile north-east of Mallampatti, a village in the Pudukkottai State nineteen miles north-west-by north of the town of Pudukkottai. Very little of the out crop is seen, but a good deal of a rich magnetite bed is scattered about the fields a little to the eastward of the Mallampatti granular quartzose gneiss referred to".

A geologist, Alexander Primrose, who examined the area in 1900 thought it "not improbable" that "a fairly continuous reef representing a very extensive deposit of ore" was available under the Mallampatti ground. "As much of the principal deposit traced lies near the surface, mining should be easy," Primrose observed and added: "There is no doubt I think that further deposits will be discovered". This optimism has not been justified. The Geological Survey of India, Calcutta, to which some of the Primrose specimens were sent for analysis, observed that the Mallampatti deposit would not be worth exploiting unless found in large quantities (Darbar Records, Pudukkottai). In 1935 Sir Alexander Tottenham, then Administrator of Pudukkottai, wrote to the South Indian Railway Company to ask if they would like to use the Pudukkottai ore in their works at the Golden Rock Workshops. Proximity, Tottenham felt, would be a strong point in favour of such an arrangement. The S.I.R., however, replied that the

quantity of ore was not sufficient to warrant capital expenditure on their part over the installation of a smelting plant. In the context of the old Pudukkottai State with an approximate area of a thousand square miles, the occurrence of ore might have held some (proportionate) significance. But it does not do so any more; the reserve has in fact, been reported now by the Geological Survey of India as "insignificant," apart from being "very low grade."

The Oil and Natural Gas Commission of the Government of India has covered Pudukkottai District in its geological and reconnaissance geophysical surveys under its programme of oil exploration in the Thanjavur sub-basin within the Cauvery basin¹ initiated in 1958. Two "information wells" have been drilled under this programme near Gandharvakottai and Nakkudi. The Commission's programme of work in this area has so far been oriented towards understanding the geological setting of the sub-basin and its history of sedimentation. This work is expected to continue for some years more and it is only after these investigations are over, will any assessment of the oil and gas prospects of the region be possible. Seismic surveys conducted by the Oil and Natural Gas Commission in the sub-basin so far have indicated that the thickness of sediments in the deepest part of the sub-basin may be as large as 5 kms. mostly consisting of mesozoic sediments. They have also revealed that a number of marine transgression and regression cycles have taken place in the region during the Cretaceous age, causing conditions leading to reef growth at places which appear to have undergone subaerial lithification.

No minerals of economic significance, therefore, have been identified in the Pudukkottai region. But in this disadvantage it is not alone. To quote D. N. Wadia again²: "Nature has made a very unequal territorial distribution of minerals in the Indian region". Bihar, Orissa and Madhya Pradesh with their concentrations of ore, coal, atomic and industrial minerals are the only States in India that may be called minerally rich. Tamil Nadu accounts for only 3.3 per cent of the all-India mineral production.³

¹ The main Thanjavur sub-basin lies between Archaean outcrops to the west Kumbakonam-Shiyali sub-surface ridge to the north and Devakottai-Pudukkottai subsurface ridge to the south and west.

² *The Gazetteer of India*, Volume I (1965); page 158.

³ *Tamil Nadu—An Economic Appraisal* (1975) prepared by the Finance Department, Government of Tamil Nadu.

Pudukkottai's mineral deficiency, therefore, is of a piece with Tamil Nadu's. In the meantime, the State Geology Branch and the Tamil Nadu Mineral Development Project continue detailed investigations in all parts of the State for mineral deposits such as graphite, limestone, heavy mineral sands, iron ore, clay dolerite dykes and base metals.

If deposits of significance are found in the Pudukkottai tract as a result of these investigations, the thirteenth century lamps lit by Vikra Pandya at Tiruvarangulam with smelt money would not have burned in vain.

Earthquakes.—Only one earthquake has disturbed the Pudukkottai earth crust in recent memory. A letter¹ dated the 8th February 1900, from the then Diwan of Pudukkottai to the Collector of Tiruchirappalli who was Political Agent for Pudukkottai, says ".....at 3-10 a.m. last night a violent shock of earthquake accompanied by rumbling noise was felt at Pudukkottai." The tremor caused no loss of life or property although some cracks were noticed on the walls of many buildings.

Tanks and Rivers.—While Pudukkottai district can be separated into two geological zones, one rocky and the other plain, there is a physical aspect common to the whole. Tanks dot its entire surface like a veil of crochet. The district has 5,128 such tanks. Kulattur taluk has the largest number among the taluks (1968), followed by Tirumayam (1595), Pudukkottai (533), Arantangi (531) and Alangudi (501).

The word 'tank' normally suggests a metallic or other artificial vessel for holding liquids or gases. In the present context, however, the term refers to the reservoirs of water formed by an artificial bund across sloping ground, obstructing the natural flow of water. (The ideal location is when the sloping ground is wedged in between two mounds or hillocks). All the tanks in Pudukkottai district except 97 in Arantangi taluk and 18 in Alangudi taluk are fed by rain. The tanks get their rainwater supplies either through intermittent jungle streams since they are invariably on lower ground than the uncultivated jungle lands, or by intercepting

¹ Darbar Records, pudukkottai.

surface water from their catchment area. Most of these tanks, as in the other districts like Chingleput, for example, were created in megalithic times by the bunding of the lower part of the terrain sloping down to the river valley from the foothills or outcrops to collect and store the water that was let out in regulated amounts for irrigating the fields on the other side of the bund. Because these tanks empty themselves (*Maaythal*—மாய்தல்) through sluices let through the bund (*Kann*—கண்) they came to be called **Kannmai** (கண்மாய்). The **Kannmaais** follow a regular pattern being bunded up areas at the various stages and contours of the slope from the highground or foothills to the river valleys. They are so located that the surplus of the one above flows into the next one below. (This succession or chain of reservoirs following successive lower contours has anticipated the contour bunding of modern anti-erosion techniques). The tanks in Arantangi and Alangudi taluks that are not rainfed obtain their supplies from the canals connected to the irrigation-system of the Cauvery-Mettur Project.

The district's ayacut fields are irrigated by these tanks.¹ There are no rivers in Pudukkottai in the sense of waterflows coursing perennially and self-sufficiently from source to sea. The district's so called rivers are really jungle streams that themselves take their rise from tanks. These streams are fed by the surface drainage of jungles and wastelands or by the surplus water of large tanks. But since the tanks surplus only temporarily when sufficient rains have fallen, they are seldom full.

The Census Report of 1921 for Pudukkottai State observes somewhat ruefully: "The jungle streams which remain parched up except for some days in the year can be called rivers only by courtesy". A touchingly frank description of the system is provided by N. Thiagarajan, some time Principal of H. H. The Rajah's College, Pudukkottai, in *A Child's History of Pudukotah*, (1932): "Rivers generally flow from mountains but our streams rise from tanks. When the rains fall, the tanks fill and overflow. This water runs down in streams. Across their way dams or short walls are built and the water is let into other tanks and stored up." When the monsoons do not visit Pudukkottai as and when they should, the tanks and rivers go dry simultaneously. Writing of the tank-pitted

¹ For details on the district's irrigation system see Chapter IV.

Pudukkottai-Ramanathapuram terrain, Spate observes (*India and Pakistan*) : "Except after heavy rain.....practically all tanks and streams are dry ; and from above the landscape is a medley of all shades of khaki, ochreous yellow, and rusty red, with a few bottle-green blobs like a surface of vast overlapping fish-scales. For most of the year the impression is arid and desolate in the extreme...." Meant to function as conveyors of water, the tanks and streams then act as a grid communicating drought. The last occasion when Pudukkottai witnessed this phenomenon was in the rainless months of 1974 and 1975.

The most significant of the streams is the historic Vellaru¹. It rises in the Velamalai near Marungapuri in Tiruchirappalli district, entering Pudukkottai district at the Minaveli tank in Kulattur taluk. It thereafter courses through places such as Kudimiyamalai Peraiyur, Kadayakkudi and Valanad, dividing Tirumayam taluk in the south from the Kulattur, Alangudi and Pudukkottai taluks in the north. Entering Arantangi taluk at Kovilkottai, the Vellaru joins the Bay of Bengal at a point north of the fishing centre of Manamelkudi.

The river has a total length of 85 miles, of which 25 miles lie in Tiruchirappalli district and 60 miles in Pudukkottai district. There are several anicuts, of mud and masonry, all along it. An anicut near Kudimiyamalai diverts Vellaru waters to the tanks at Visalur, Vayalogam, Perumanadu and Kavinadu. The last-named tank, which is the biggest in the district, also gets some water from an anicut on the Vellaru at Sendamangalam. The Holdsworth² anicut diverts water from the river to the Valanad tank.

The Vellaru is known, when high freshes have entered it, to have risen torrentially. Such outbursts have been, mercifully, both rare and brief.

¹ This river Vellaru has to be distinguished from the river of the same name which rises in the Salem district and flows along the borders of the Tiruchirappalli and South Arcot districts entering the sea at Porto Novo. The Vellaru with which Pudukkottai is concerned is often called southern Vellaru, the other one being called the northern Vellaru.

² Named after B. G. Holdsworth, I.C.S., Administrator of Pudukkottai from 18th November 1931 to 2nd January 1934.

The river, which served as a watershed between the Chola and Pandya kingdoms and later between the Rājas of Tanjore and the Setupatis of Ramnad, has a mythological origin ascribed to it in local lore. The *Tiruperundurai Puranam*¹ informs its readers that a king named Svetaketu sent up a prayer to Siva for a river that would confer bliss on those who bathed in it. The prayer was granted and the river was named after the king, Svetanadi. "Whatever the truth of this may be," observes M. Arokiaswami in *The Early History of the Vellar Basin* (1954), "a few places like Peraiyur, Pushyatturai, Kadayakkudi and Tiruvidayapatti, arose as sacred bathing ghats all along its course in due time." Ritual bathing is still to be witnessed at these sites on the festivals of *tai pushyam*, *Chitra pournami* and *amavasai*. 'Svetanadi' means, in Sanskrit 'white river' as also does the Tamil word 'Vellaru'. Thiagarajan, however, ascribes the name to the river's sandy bed. K. R. Srinivasan observes². "I would rather say that it derives its name after the name of its source—Velimalai (வேளிர்மலை) or Velimalai (வேளிமலை), the hill of the Velir tract in Marungapuri (Tiruchirappalli). The river originating in Velimalai would be called Vellararu (வள்ளாருறு) even as the river originating in Surulimalai (சுருளிமலை) is called Suruliaru (சுருளியாறு).

The Pambaru or 'Snake river' has its origin in the outflows of the Perundurai tank in Tirumayam taluk. The river has also been called Pambanaru. The most important tank fed by the Pambaru is the one at Irumbanadu in Tirumayam taluk. Masonry anicuts across the river at Nedungudi in the same taluk supply Pambaru waters to a series of tanks near the Kilanilai fort. Flowing in a south-easterly direction for about 19 miles in that taluk, this river all but joins the Vellaru near Arantangi, divides itself into five branches near Tiruppunavasal and then collapses into the Bay. On a map, the spectacle of the Pambaru's serpentine route and five-pronged entry into the sea, brings the legendary five-hooded cobra to mind.

¹ This *puranam* is one of the several Tamil Manuscripts brought to light by U. V. Swaminatha Aiyar. Published in 1892, this old document refers to the river in the portion entitled *Vellaru-padalam*.

² In a note for the *Pudukkottai District Gazetteer*.

The Perungaluru or Agniaru, which has a grandiloquent alternative name in Sanskrit, 'Agnanvimochaninadi' or 'the river that liberates one from ignorance', has only a brief course. Rising as an outlet of the Kulattur irrigation tank, the Agniaru passes through Perungalur, Malaiyur and Karambakkudi. It supplies water to tanks in the Kulattur and Alangudi taluks before entering the Bay of Bengal southwest of Adiramapatnam in the Pattukkottai taluk of Thanjavur district. At Ichaviduthi near Karukkurichi East (Alangudi taluk) the Agniaru and the Grand Anicut canal cross without meeting. The Cauvery waters of the canal are lifted in an aqueduct at the crossing, the Agniaru flowing below.

The Ambuliyaru commences in the Manjankanmoi or the Manjanviduthi tank in Alangudi taluk. Beginning with the Brahambalsamudram tank, the Ambuliyaru feeds tanks in the Alangudi taluk.

Other streams or runnels of note are the Koraiyaru, Kundaru Kolavanaru and Narasinga Cauvery. The Koraiyaru is a surplus channel of the Tenambadi tank a mile from Viralimalai in Kulattur taluk. It feeds a number of tanks in the taluk both directly and through a recently constructed anicut near Mullaiyur. The Kundaru, in the Pudukkottai taluk is a surplus channel of the Kavinad tank and flows two miles south of Pudukkottai town beginning at the Kavinad tank and ending at the Vellaru, north-west of Kadayakkudi. The Kolavanaru in Arantangi taluk feeds eight tanks by means of an anicut before entering the Palk Strait at Mimisal. The Narasinga Cauvery in Arantangi taluk, is formed by the surplus of the Vellaru.

Lest the description of the flow and direction of these rivers should lead the reader into imagining that Pudukkottai is a tract of gurgling streams and brimming tanks, it might be re-emphasised that these rivers are more often than not just empty water-courses.

It will be noticed that the names of these streams end with 'aru', which is the Tamil for 'river'. Described independently, each of them would be more appropriately termed 'odai' or 'sitraaru' which words signify 'stream'. But the word 'aru' is employed commonly while suffixing to a river's specific name, a description of the genus.

The tanks, likewise, are for good parts of the year, mere mud-flats. Rains need to come, plentifully and in good time for the water-courses to see movement and for the tanks to rise.

Seacoast:—The seacoast, on the contrary, wears a constant look. The Coromandel coastline, which is so strongly longitudinal until Point Calimere, bends inwards here forming the Palk Strait. The Strait, along which the district's coastline winds, is one of the calmer sections of the sea. The width of the continental shelf in the Strait is the greatest at any point of the Bay of Bengal, because of the local insulation caused by the two narrow necks of land in the Palk Bay, one coming from the Indian side and the other from Sri Lanka and connected by a submerged reef. The Palk Strait's sea-floor has thus got raised and its waters have been becalmed. The 26·3 mile-long Pudukottai coastline is washed gently by the surf.

Coastal sands formed by tidal deposits cover areas adjoining the seaboard and occupy 56·85 sq. kilometres. The deep yellow and brown sands of the Arantangi coast contain shells and pieces of marine origin in their bottom layers. But the extensive chank reefs so common around the islets and shoals of Rameswaram and Kilakkarai do not occur as significantly in the lands off the Strait.

Where the district's rivers enter the sea, estuarine islets have been formed. The point off Mimisal, where the Kolavanaru joins the sea, is one such. Over sixty acres in extent, this islet is a raised patch of sand carpeted with *Ipomaea pes-caprae* streamers. It is girt on three sides by the Kolavanaru. On its east is the sea. It bears the interesting name of 'Vellaikkaaran Thittu', which means the white man's ground. The name is explained by a belief held locally that British officers camping at Mimisal in the nineteenth century with their wives and children used to pitch tents and sport at this seaside retreat. A similar estuarine formation can be seen at the southern most tip of the district, south-east of Tiruppunaval, where the Pambaru or Pambanaru joins the sea.

The Pudukottai seaboard, like in the rest of the Coromandel Coast, has a simple structure. Fronted with low submarine plains, much of the land's edge is lined with coconut trees. Tethered

plank-boats belonging to Arantangi's seafaring fishermen bob along its length. The scene pictured by Sorojini Naidu in a little known poem of hers entitled 'Coromandel Fishers' is to be witnessed everyday in the fishing villages on this shore¹:

Rise, brothers, rise, the wakening skies pray to the morning light.

The wind lies asleep in the arms of the dawn like a child that has cried all night.

Come, let us gather our nets from the shore, and set our *catamarans* free,

To capture the leaping wealth of the tide, for we are the sons of the sea.

Sweet is the shade of the coconut glade, and the scent of the mango grove,

And sweet are the sands at the full o' the moon with the sound of the voices we love.

But sweeter, O brothers, the kiss of the spray and the dance of the wild foam's glee :

Row, brothers, row to the blue of the verge, where the low sky mates with the sea.

ECOLOGY.

The Mercury.—The climate of the Pudukkottai district resembles that of the surrounding districts. The late Chakrapani Aiyangar, State Metereological Superintendent under the Pudukkottai darbar drew in 1916 the following picture of Pudukkottai's climate for Radhakrishna Aiyar's 1916 *History* : "The granite and laterite earths that compose the majority of the surface soil get baked in the hot sun that shines relentlessly for nearly nine months in the year, and the air that blows over the place is dry hot air calculated to dry up the blood and sap the energies of the people". The description is doubtless a bit extreme. Hemingway, in the *Gaztteeer of the Tiruchinopoly District* (1907), in fact, observes that Pudukkottai being not far from the sea, is cooler than Tiruchirappalli. The district has a hot tropical climate, humid near the coast.

¹ With the difference that catamarans, the tied three-log crafts so good at riding the rough Coromandel wave are not common here. Boats made of nailed planks designed for sailing on smoother waters are used instead. For details on the district's sea-fishing practices look under 'Fisheries' in Chapter IV.

The summer season is from March to May. The south-west monsoon season lasts from June to September. October and November constitute the post monsoon or retreating monsoon season. The north-east monsoon is over by the second half of December. In this season rainfall is generally confined to the first half while in the remaining half mostly clear bright weather prevails.

There is no meteorological observatory in the district. Hence the Deputy Director-General of Observatories, Poona, on whose description of the climate the following lines are based, has gathered his data from the adjoining districts having similar climatic conditions. After February the temperature increases steadily till May, which is generally the hottest month with the mean daily maximum temperature at about 37°C and mean daily minimum temperature at 26°C . On individual days the maximum temperature may occasionally reach 43°C . Sea-breeze in the afternoon brings some relief to the coastal belt from the oppressive heat. Occasional thundershowers during April to June also bring welcome relief, though temporarily. Temperature slightly drops with the onset of south-west monsoon by about the end of May or early June. Though September and October are cooler, increased moisture often turns the weather sultry. From November onwards, the weather becomes cool.

The relative humidities are generally between 50 to 80 per cent but during the period from February to July the air is drier.

The Pudukkottai sky is generally heavily clouded to overcast in the south-west and retreating monsoon season. In the early part of the north-east monsoon the sky is moderately to heavily clouded. In the rest of the year it is mostly clear.

Winds are generally light except during June to August when the force strengthens slightly. Winds blow mostly from directions between south-west to north-west during May to September. North-easterlies set in by about beginning of October and they become progressively more common with the advance of the season. Winds blow mostly from directions between north and east during November to March. By April southerlies and westerlies appear.

The district is not much affected by depressions during the south-west monsoon period but in the retreating monsoon and north-east monsoon season, the depressions and storms from the Bay of Bengal affect the weather over the district. Thunderstorms occur during April to November.

The 'Monsoonal Rhythm'.—Theoretically, the district's humidity and precipitation cycle or what Spate has described (*India and Pakistan*) as the 'monsoonal rhythm', is as follows: The month of March is marked by the lowest humidity and the lowest percentage of cloud. This situation persists through April. In May and June a change comes on and dense lower clouds begin to appear and cause a few light showers. The south-west monsoon wind begins to blow from the middle of June. July, August and September witness plentiful precipitations, August often being the month of the heaviest rainfall in the year. The northerly breeze of September-October shifts to the east when the north-east monsoon breaks. Should September show a decrease in precipitation, October and November generally recompense. December, January and February are marked by scanty or no precipitation, except of an erratic nature.

But this cycle is scarcely so regular. The area's meteorological history is replete with instances of departure from the regularity of the rhythm.

Records of rainfall are available for a number of rain gauge stations, mostly for a period of 50 years. The average annual rainfall in the district is 921.8 mm. The annual rainfall varies from 983.2 mm. at Pudukkottai to 839.9 mm. at Viralimalai.

Frequency of Annual Rainfall in the District (Data 1901—1950).

Range in mm.		Number of years.		Range in mm.		Number of years.	
(1)		(2)		(1)		(2)	
501—600	.. ..	1		1001—1100	.. ..	8	
601—700	.. ..	1		1101—1200	.. ..	6	
701—800	.. ..	8		1201—1300	.. ..	1	
801—900	.. ..	12		1301—1400	.. ..	1	
901—1000	.. ..	11		1401—1500	.. ..	1	

The rainfall in the early months of the south-west monsoon is much less than that in the later months. The rains continue till the early period of the north-west monsoon season. October is generally the rainiest month.

The average number of rainy days (days with a rainfall of 2·5 mm or more) in a year in the district is about 52. This number varies from 58 at Perungalur and Pudukkottai to 45 at Udayalipatti.

The heaviest rainfall in 24 hours recorded at any station in the Pudukkottai tract was 444·5 mm. on the 23rd of November 1893 at Kilanilai.

Floods.—Cyclonic weather and extreme rainfall have caused floods in Pudukkottai district at periodic intervals, the earliest recorded flood having occurred in 1709. Nearly all the tanks burst and the crops were destroyed. 1809, 1827, 1877, 1884, 1888, 1890, 1893 were the flood years in the nineteenth century. 1919, 1920, 1921 and 1930 have been the more recent flood years. The frequency of torrential rains and floods, however, has been falling over the decades, drought being the more common of the two erraticisms.

Drought.—Pudukkottai's recorded history lists a succession of years that have witnessed an extreme scarcity of water, which is drought ; and a consequent scarcity of food, which is famine.

The first accounts of famine in Pudukkottai are on stone. An inscription at the Perumal temple in Ponnamaravati, dated 1453 A.D. which has been described¹ as the "earliest known reference on record" on the subject in those parts, reports² that—

".....the treasures of the temple of Perumal Alagaperumal Vinnagar—Emberuman appointed to the temple service, one Mallayi, her daughter and men who came to the village after much sufference during the famine in the previous *Nala Pramaduta* and *Pirasapati* years....."

¹. *A Manual of the Pudukkottai State*, 1921, p. 311.

². Inscriptions No. 793, in the *Chronological List of Inscriptions of the Pudukkottai State*, 1929.

Another inscription¹ at Melur, dated 1455 A.D. registers

“.....a sale of the padikaval rights in the village in auction by the residents of Melur to the inhabitants of *Rasinga-mangalam* in the southern division of Ponnamarapadi-nadu for 500 *sakkara-panam*, as they suffered much in the famine caused by the failure of rain.”

At Irumbanad, there is an inscription² which Radhakrishna Aiyar quotes in the *History* (p.111) as saying:

“The lands had become waste (on account of a drought) and that the people, finding it impossible to live in the village, abandoned it in a body and went to other places to find means of subsistence”.

This inscription relates³, apparently, to the famine of 1708-09. The Christian Mission at Avur, of which the renowned Tamil scholar and padre Father Beschi (also known as Viramamunivar) was to be in control a decade later, sent its members Father Bertholds and Father Veyra to report on the drought. They observed⁴ that this famine was such as “the oldest among the living have never witnessed”.

This famine, caused primarily by the failure of rain, seems to have so injured agriculture and the rural economy that the country took “nearly 20 years to recover from its effects”. *A Manual of the Pudukkottai State* (1940) tells us that the famine began to end only in 1730 by which time not one-thirtieth of the population survived. We are told by the same source that as a result, the price of rice which was ordinarily one *panam* for eight *marakkals* rose to four *panam* per *marakkal*. Occuring as it did, in the early eighteenth century, when the use of paper for writing official accounts and reports was not in vogue⁵, this famine is not well-documented

1. Inscriptions No. 801, in the *Chronological List of Inscriptions in the Pudukkottai State*, 1929.

2. p. 312 of 1921 *Manual*.

3. *Ibid.*

4. *Ibid.*

5. Even the first comprehensive official report on the Pudukkottai State *The Statistical Account of Pudukkottai State*, prepared by the Darbar for the East India Company, in 1813, is on cadjan-leaf. It is preserved in the Government Museum at Tirugokarnam, Pudukkottai.

The only data available on it is the Irumbanad inscription and the Mission letters from Avur. Had more statistical details been available, the 1708-09 famine would necessarily have been regarded as a formidable standard and archetype of drought. 1733 was again a period of drought due, "in the first instance, to a great failure of rain"¹.

The nineteenth century recorded a series of major droughts in Pudukkottai. The first two of these occurred in the reign of Raja Raghunatha Tondaiman² (1825-1839). When in 1837, the rains failed, he arranged for the purchase and storage of paddy.

1866 and 1868 were again periods of distress the rains failing entirely and the tanks drying up. A significant amount of statistical detail is available for these two droughts. The *Manual of Pudukkottai State* (Volume I, 1938), tells us that "both *kalam* and *kodai* were failures and the result was a large-scale migration from the State of ryots, traders and weavers". The manuscript *Administration Report* for 1866, preserved in the record room of the office of the Revenue Divisional Officer, Pudukkottai, contains an account³ of the impact of a poor crop on land revenue receipts.

This was the first drought to take place in the Pudukkottai State after the 'Mutiny' and the transfer of power to the Crown.

We have the following description⁴ from the then Sirkele (Diwan) of Pudukkottai, Bhavanishenker Row:

¹, p. 313 of 1921 *Manual*.

², p. 394 of Radhakrishna Aiyar's *History* 1916. Bought on credit, this act is the first evidence in Pudukkottai of (i) the incurring of a deficit expenditure on drought, and (ii) the creation of a buffer stock in anticipation of food scarcity. To the same Raja, who seems to have been endowed with an unusual degree of foresight and imagination is due the credit of another 'first'. He recommended (p. 8 42 of *A Manual of the Pudukkottai State*, Volume II—Part I, 1940) in 1838 the introduction of the waters of the Cauvery in the State. Both the Resident and the Governor of Madras supported the Raja's suggestion. But the Court of Directors of the East India Company thought the project would be too costly and dropped the matter. Raghunatha Tondaiman's handling of the drought of 1837 reveals just the "preventive and anticipatory" quality of administration that an endemic area of drought requires.

³. "However", it says, "the uncommon rates of prices at which the kinds of grains were sold made good the loss to a great extent, leaving only a decrease of Rs. 11,589-0-6". (Darbar Records, Pudukkottai.)

⁴. Report on the Administration of the Pudukkottai State for Faslî 1286. (Darbar Records, Pudukkottai.)

“ Almost the entire failure of rain in the Fasli under report has subjected the people of this territory to hardships of various descriptions.....Great many lives have fallen victims to the ravages of epidemic diseases..... ”

The years 1879-80, 1884-85, 1889-90, 1893, 1895 and 1898 were also affected by droughts of varying intensity. The first four of these took place in the Administration of the Diwan Sir A. Sashiah Sastri. The pattern of relief operations was largely the same as that employed in 1876-78. Sastri's most significant contribution to drought-relief, however, is his work on the renovation of two tanks that supply water to Pudukkottai town : the Pallavankulam and the Pudukulam. The renovation of the former was taken up during the 1884-85 famine and is described graphically in the *Manual of the Pudukkottai State* (1921). The repairs were carried out by means “truly oriental” involving the conscription of some 5,000 labourers from all over the Pudukkottai State.

“all the thousands of men worked in the boiling heat, with the Karbar of the State and of the Jagire, the Tahsildar and other high officers personally whipping them on to exertion ; and a never-ending line of men and women carried the slush and the silt in relays ; and an ever-multiplying number of hand-picotahs and swing-baskets drained the tank of its liquid² contents..... ”.

The renovation of the Pudukulam in Pudukkottai town was also taken up during the drought of 1889, with the intention of enhancing the tank's capacity to hold 115 million gallons of rain-water in order to supply the town with drinking water.

The first two decades of this century witnessed drought-conditions in 1904-05, 1907-08, 1909-10, 1921-22 and, almost continuously, during the long spell from 1925-26 to about 1930. Accounts of their incidents and relief are available in the respective *Administration Reports* of the Pudukkottai State¹.

1. The designation was changed subsequently to ‘Diwan-Peishkar’. The duties of the post approximated those of a Collector.

2. p. 433 of the 1921 *Manual*.

Paragraph 203 of Administration Report for Fasli 1331 (1921-22).
Paragraph 197 of Administration Report for Fasli 1335 (1925-26).
Paragraph 208 of Administration Report for Fasli 1336 (1926-27).
Paragraph 214 of Administration Report for Fasli 1338 (1928-29).

The next significant drought occurred in 1945-46. The Diwan at this time was Sir Alexander Tottenham. He estimated the rainfall during the season to be lower than any year except four since Fasli 1333 and the then season as being one of the worst in his tenure¹ in Pudukkottai.

In the post-merger period, Pudukkottai has experienced two major droughts. The first of these took place in 1969 when a sum of Rs. 6 lakhs was spent in the three taluks of the then Pudukkottai revenue division on wages to displaced agriculture for deepening drinking water wells (Rs. 4 lakhs) and repairing tanks (Rs. 2 lakhs). The second and last drought was that of 1974-1975. Pudukkottai district received as aid against this "unprecedented" drought the equally unprecedented allocation of over a crore of rupees. More than half of this was spent as wages for labour on repairs to irrigation works, and the balance on drinking water wells, roads and soil conservation.

Flora : The Background.—Writing of Oxbridge in *A Room of One's Own*, Virginia Woolf speculates:

"Once, presumably, this quadrangle with its smooth lawns, its massive buildings, and the chapel itself was marsh too, where the grasses waved and the swine rootled".

As in Oxbridge, the elaborately carved New Palace and other public buildings of Pudukkottai town, and its imposing Roman Catholic chapel, were once part of a dense forest. Inhabited first by Veduvārs or hunters alone those early woods were, in early times, part of a division with a tell-tale name: Panrinadu (பன்றி நாடு) or 'the land of pigs'. The region abounded, apparently, in rooting boar and fauna of like nature. Panrinadu which was one of twelve such nadus, lay between the Panrinadu with Madurai as its capital and the Punalnadu (புனல் நாடு) through which flowed the Cauvery². The former was ruled by the Pandyas and the latter by Cholas. Panrinadu had practically no settled lands and, therefore, no specific ruler. It fell within the provinces of the Cholas at one time and the Pandyas at another. The Vellallas were able to bring only some riparian portions of the Panrinadu forest lands under the plough.

¹. Tottenham was Administrator of Pudukkottai (a post that combined the powers of a Diwan and a Regent) from 1934 to 1944, and Diwan from 1944 until his death in Pudukkottai town on 13th December 1946.

². Panrinadu extended much to the north of the present Alangudi and Pudukkottai taluks, into the present Thanjavur district.

Early literature contains several references to these forest tracts. A passage in the ancient Tamil classic *Silappadikaram* is, in fact, a gazetteer in-capsule of the terrain of the Pudukkottai region. Describing the geomorphology of the route taken by its hero, Kovalan, on the journey from Uraiyar to Alagarmalai, the *Silappadikaram* says :if you take the route on the left from Kodumbai¹, you will have to travel through fields and jungles and weary wastes to Alagarmalai”.

The classic refers to a period in the second century of the Christian era. The mention of fields and jungles in the tract in so early a time is an indication of Vellala husbandry in the midst of forest lands. In time, the lands of settled farms came to be known as the Konadu (கோனாடு), while the forest fields came to be called the Kanadu (கானாடு).

The woods were a natural sanctuary for predators and prey. The Vaishnavite Saint Vedanta Desikar is known to have passed through these forest tracts of the கானாடு in the thirteenth century. Desikar's perceptions of its terrain are found in his poetical work *Hamsa Sandesa*. The description² is contained in the form of journey-advice being tendered to a musical hamsa or swan : “Quickly pass then the forest between the Chola and Pandya countries which is occupied by robbers and is harsh on the ears with the noise of crickets : after that region is crossed, manifest your pleasing sounds, for poets do not open their mouths before the wicked ones”.

How thick the கானாடு forests were can also be gauged from parenthetical statement contained in the ballad *Ambunattuvalandan* which describes the capture in 1781 by the Tondaiman of a fearful and inglorious ‘single-horseman’ from Hyder Ali's cavalry, who had ravaged the countryside. This equestrian pillager had found concealment in the thick forests near Viralimalai :

“மஸ்தகம் பதித்ததொரு விராமிமலை தன்னில்
(ஊசிநுழையாத உடைவேலான் காட்டிலே)
ஒற்றைக்குதிரைக்காரன் ஒருமையாக வந்தவனை
பற்றித் தரத்திவெட்டும் பகதூர்ராயத்தொண்டைமான்”

1. Kodumbalur.

2. The relevant lines have been translated into English prose for the Gazette by the Sanskrit Scholar V. Raghavan.

The forest is described in this song as being so full of acacia trees that a pin could not be thrust into it.

Like literary works, certain historical accounts also afford a view of the Pudukkottai forests. Kattabomman, the celebrated Palayakar of Panchalankurichi, for whose obdurate head the East India Company was avid, must have been aware of the capacity of the Pudukkottai Jungles to offer a hideout. Pursued by the forces of the East India Company under the command of Major Bannerman and of the Palayakar of Ettayapuram, Kattabomman escaped in 1799 first to Sivaganga and then to the thick woods of Pudukkottai where, after much searching, he was apprehended.

In August 1826, Thomas Munro as Governor of Madras undertook a tour of the southern districts of the Presidency. At Viralmalai, Raja Raghunatha Tondaiman had an interview with the visitor. The following record¹ of their conversation is interesting.

Munro : About forty years ago when I passed by this way from Melur, I saw thick wood in this country. Is it now cut down and are the lands cultivated?

Raja : The woods having almost been cut down, cultivation is now going on. There still remains thin wood in some places.

Munro's reference to an earlier visit relates to the time when he had passed through the Tondaiman's country in 1784 as a Lieutenant in the Army, after the conclusion of the Company's treaty with Tipu. That visit had taken place within three years of the horseman's hiding in the impenetrable acacia forest. Munro's reference to the 'thick wood' tallies with the description in the horseman song. But by the time Munro came on his second visit (that is, about forty years later) the forest lands had begun to yield place to agricultural lands. The Konadu lands were cutting into the Kanadu lands—a process that has continued to the present day.

¹. Radhakrishna Aiyar's '*A General History of the Pudukkottai State*', 1916 pages 377 378.



PHOTO: P. R. Mohd. Basheer

Memecylon edule — a typical Pudukkottai shrub.

Forest Administration.—Attempts at forest conservancy however, can be seen to have been taken up in 1870. A separate department was instituted in that year by the erstwhile Pudukkottai Darbar, mainly to protect forest growth so as to secure game for royal hunts. Notifications were issued by the Diwan Regent making poaching and hunting by others penal offences. The department also supplied fuel from the woods for public works and issued permits to private individuals on payment of seigniorage for the removal of produce. It also undertook the planting of certain select species like casuarina, bamboo and cashew. Mango and coconut plantings were also undertaken.

E.D.M. Hooper, then Conservator of Forests in the Central Circle, who undertook a survey of the Pudukkottai forest areas in 1904, observes in his report :

“...on the level and low-lying portions there is a thick growth of *Memecylon* which is in parts hardly penetrable, and overhead are standards of *Mimusops*, *Pterospermum*, *Albizzia amara*, *Dalbergia paniculata* with a lower growth of *Atalantia* and *Ixora parviflora* ; at higher levels there are *Wrightia*, stunted Satinwood and Nim, *Acacia caesia*, *Mimosa rubiculus*, *Zizyphus*, *Carissa*, etc.

In the open tracts the undergrowth consists largely of prickly-pea and the standards *Acacia latronum* and *Albizzia amara*. This is especially the case of Pulvayal. There is practically no grass found for the soil is sandy with laterite layers or else alluvial in the low lying patches. The areas are all demarcated, but the boundary stones are small and not easily traceable. The protection given to the forest and game does not extend to the fringe of outskirts of the blocks which in the case of Sengirai are exposed to concentrated clearing by the villages for produce including grazing, leaving only *Dodonea* and lemongrass.

There are few well grown trees in the wastes, those present being the outcome of damaged saplings and have a rotten interior & they are allowed to remain as seed bearers for which alone

they are useful. Exception must be made of the *Pterospermum* which is represented by handsome healthy specimens, tall and slender, especially in Sengirai and Nordamalai.¹

1. Sir Alexander Tottenham's Library in Pudukkottai contained an interesting little book *Some Madras Trees* (1911) by Alan Butterworth, I.C.S. The book gives a layman's description of some of the flora mentioned by Hooper :

Memecylon edule : "A shrub commonly or a very small tree with brown bark and dropping boughs. There are several species which may easily be confused. *Edule* is probably the commonest.... The leaves are opposite and decussate, on short petioles, elliptical or oblong but tapering somewhat at both ends, upto about 3 inches in length ; below dull green, above rather glossy ; the veins are indistinguishable. The flowers, which are very small, grow in abundance out of the boughs in corymbose clusters on short stalks. The calyx-tube is (often at all events) pink ; the 4 petals are of a beautiful bright blue. The stamens, the large anthers and the long style are also blue. The tree, when in bloom, looks from a little distance as if the branches were covered with a blue mildew. The fruit is a small, round berry about the size of a pea.... Talking of blue mildew on boughs somehow recalls a story I heard from a Forest Officer. He was after bison on the ghats above Canara and got benighted. As he was groping through the jungle he came suddenly, on a valley which seemed to be filled with flickering, blue fire and looking closer found that all the branches of the trees and shrubs there were outlined with a phosphorescent glow. He tried to find this enchanted valley again by day light but was naturally unsuccessful.

Mimusops elenghi : "Generally characterized by a short, dark and very rough trunk and wide-spreading, often drooping, boughs.... The leaves are generally very glossy and are dark-green when old, closely but faintly veined, elliptic or oblong, short or long acuminate, wavy-margined, alternate, on petioles and inch or less in length.... The flowers are scented and long retain their fragrance.

Pterospermum suberifolium : This rather handsome tree is pretty common.... grows big, certainly to a girth of 12 feet and a height of about 60'.

Albizzia amara : "A very common tree of small to medium size. It resembles the ordinary acacias in appearance and it is an agreeable surprise to find that it has no thorns. It can often be distinguished among other trees by a slightly bluish tint in the foliage and the contrast between the light-green young leaves and the dark-green old ones is often marked.

Albizzia lebbek : "It grows large and has generally a rather straggling look. the foliage begin sparse and the boughs large.... It can often be recognised by a certain patchy look about the trunk which is grayish, or brown, or gray blotched with black.... The flowers are small and very fragrant, scenting the air with a honey like smell. The most conspicuous things about them is the numerous, silky stamens of yellowish-white tipped which may be nearly 2 inches long.

Ixora parviflora : "The inflammability of the green branches which are used as torches accounts for the English and other names.... It has smooth, often tubercled, lightbrown bark and the boughs sometimes droop to the ground.

Wrightia tinctoria : "When in flower the tree is often a mass of white bloom. The foliage is of a pretty, bright green when young, dull and rather dark later ; the veins (sunken on the upper surface) are conspicuous and often marked out in darker green....the distinguishing feature of the tree is the curious fruit. This consists of two very slender, cylindrical follicles.... The tufted seeds like in a casting of silvery silk. The follicles, and the tree generally, are milky.

Zizyplus jujuba : "A common tree and readily identified by its thorns which may be either solitary and curved or in pairs.... The bark is brown and rough, the ridges being often wavy, making a sort of criss-cross pattern. The boughs droop ; the branchlets are downy and zig-zagging.... The flowers are fragrant, minute, growing in little clusters on a very short stalk.... The fruit...is yellow or some what orange-coloured...is eaten ; it is slightly sour but mealy and tasteless.

We are grateful to K. Nagarajan, lawyer friend of Tottenham's, for showing us the former Diwan's copy of the Butterworth book.

He recommended to the Darbar that some of the larger forest tracts such as at Sengirai, Narttamalai, Pulvayal, Varapur and the Kusba (the forests near Pudukkottai town) be reserved and "be closed to felling except under organised plan". He advocated the planting of teak, mahogany and *Pterocarpus* in suitable localities under the supervision of trained personnel.

The Pudukkottai Darbar raised the following topes¹:

	ACRES.
1. Kokkumari mango tope	72.45
2. Mirattunilai mango tope	52.27
3. Rasimangalam cashew tope	302.71
4. Malaiyur cashew tope	167.00
5. Karivattam cashew tope	4.00
6. Nemmāli cashew tope	8.00
7. Vellaru Coconut tope	7.92
8. Perungalur Coconut tope	5.00

Sixteen casuarina topes were raised by the Darbar on the banks of the Vellaru, Pambaru, Agniaru and Koraiyaru. Attempts to grow teak, however, failed. With the Hooper report in its hands, the Darbar notified under Regulation V of 1912 ten blocks, viz., Kasba, Sengirai Tiruvarangulam, Narttamalai, Amman-kurichi, Varappur, Pulvayal, Vayalogam, Parambakulam and Kudimiamalai as reserved forests. But the boundaries of these blocks were not demarcated by cut lines, cairns or boundary pillars, as the Darbar felt that the village survey stones of the adjoining patta lands would be a sufficient demarcation of the boundary. This exposed the forests to illicit felling. "Villagers living within easy access of the forests hardly ever pay for their fuel and for their agricultural implements" says the *Working Plan for the Tiruchirappalli Forest Division* (1959). It adds that the Pudukkottai ranges are the worst affected. Illicit removals, always present, touched peak figures during periods of drought when the picking of forest produce became the only source of livelihood possible. These capricious inroads into Pudukkottai's possessions constituted a threat to forest revenues.

Under the Darbar, Pudukkottai's plantations as well as natural forests were alternately under the administrative charge of the Diwan Peishkar, the Superintendent of Salt and Abkari or borrowed forest officers until the State's merger with the Indian Union

¹ See *Working Plan for the Tiruchirappalli Forest Division for 1955-1971* ; 1959. *Working Plans* were drawn up for each forest division by the Forest Department, and were called for a period, usually, of ten years. After taking into consideration the resources of the forest division they prescribed a plan for future management.

in 1948. Immediately after the merger the forests of the Pudukkottai area were under the charge of the Revenue Divisional Officer, Pudukkottai, who transferred them on the 16th of August 1950 to the District Forest Officer, Tiruchirappalli. The Government of Madras permitted, however, the Raja of Pudukkottai, members of his family and authorised guests, exclusive rights of chase in the ten notified blocks of the Pudukkottai range—a privilege that has, since, lapsed.

Forest Policy.

The broad principle underlying the Hooper recommendations, Darbar policy and the *Working Plans* prepared thus far, is describable as the principle of 'sustained yield'. This concept has been explained in the State Planning Commission's *Report on Forestry 1972-1984* (1972): "The growing stock (of forest trees) represents the capital. Each tree adds to its value and acquires an increment every year. The cumulative total of the increment in a year by all the trees represents the 'interest' earned by the forest 'capital'. Since it is impossible to take out the increment from each tree every year, a small part of the area is felled each year, the total volume felled being kept as near as possible to the estimated increment represented by the entire forest growth". The idea underlying this policy was that the forest 'level' was maintained and forest produce was utilized in a sustained manner affording constancy to budgetary planning. Bringing increased lands under forest amounted to increasing the volume of capital invested and led to a higher return or interest. The revenue derived thus by the Pudukkottai Darbar under the 'sustained yield' system (the Darbar did not, of course, employ the term) in a typical forest year (1934-35) is furnished below :—

	Rs.	A.	P.
(1) <i>Reserved Forests.</i> —			
(a) Timber	63	12	00
(b) Firewood and Charcoal	1,199	12	06
(c) Green leaves	2,362	04	06
(d) Grazing fees	1,347	06	06
(e) Miscellaneous	1,095	06	02
	<hr/>	<hr/>	<hr/>
	6,068	09	08

(2) <i>Plantations.</i> —						R ⁵ .	A.	P
(a) Timber	..	..	..	..	..	474	08	07
(b) Firewood and Charcoal	..	..	..	..	..	6,337	09	03
(c) Fruit bearing produce	..	..	..	..	..	827	09	04
(d) Cashew nuts	..	..	..	..	..	565	00	00
						8,204	11	02

With the launching of high level planning, however, working plans devised for individual forest divisions or blocks were found to be somewhat narrow and local. The implementation of large-scale development projects began to stymie the ground rules and directives set out in the *Working Plans*. The principle of 'sustained yield' and maintenance management came, therefore, to be given a second look. The principle of 'progressive yield' was advanced (See State Planning Commission's *Report on Forestry*, 1972) as an alternative.

This envisaged on "enrichment through changing the composition of the crop" and "upgrading of the inferior natural forest to a valuable one through artificial regeneration". The view came to be taken that the bulk of the natural forests in the State needed to be converted into plantations of high productivity.

In Pudukkottai, this new approach has been sought to be implemented by the bifurcation of the forest area into two zones, one managed by the Forest Department through a District Forest Officer, and the other by the newly constituted Tamil Nadu Plantation Corporation, an undertaking of the Government of Tamil Nadu.

The Forest Department of the Government of Tamil Nadu is in charge of the following forest blocks in the district: Lingamalai (216.97 ha.), Narttamalai (707.52 ha.), Aladiperumuthukadu (145.69 ha.), Sivalimalai (629.38 ha.), Adukkukadu (38.08 ha.), Varpet Periamalai (385.11 ha.), Kanjeerankuttu (76.77 ha.), Maravamadurai (261.45 ha.), Ammankurichi (345.31 ha.), Poovannamalai (59.08 ha.). The total area covered by these blocks is 2,865.36 hectares of 11.063 square miles.

The Tamil Nadu Plantations Corporation, manages a total of 19,692.62 hectares (76.03 square miles) of forest lands and proposes to cover the entire extent under plantations, mainly of eucalyptus. Of the 19,692.62 hectares, an extent of 9,369.91 (36.18 square miles) has been planted over upto 1974.

Eucalyptus is one of the principal raw materials for the manufacture of paper. Pudukkottai district with its new and extensive plantations is, therefore, going to play a part in the development of this industry¹.

To the naturalist, however, the large-scale removal of the natural flora in the district's forest tracts appears regrettable. What the oak, the ash and the elm are to England, or the bamboo is to China, dry thorny scrub is to Pudukkottai. It constitutes the natural floristic response to the edaphic and biotic factors present in Pudukkottai's soil. It is significant that despite organised and private intrusion into its preserve, the flora has been holding its own over the centuries. It is to be seen, yet, in a few pockets. But it may not be long before these pockets shrink out of existence.

The world over now, an increasing awareness is to be seen, of the need to preserve the environmental and ecological *status quo*. The legacies from nature such as air, water, trees and animals are being regarded more and more as precious possessions. Precious intrinsically, and also because they are getting rarer. Precious again because of the need for a balanced ecology.

The needs of development and industrialization—inescapable in a country like India or a district like Pudukkottai—on the other hand, press for a motivational exploitation of resources. Land is a scarce resource. Paper is a much-needed produce. Pudukkottai's scrub spaces can, it seems logical, be exploited to grow hybrid eucalyptus for pulp. But is a balance between man and nature impossible? Should the natural ecosystem of Pudukkottai be allowed to disappear?

1. The State Planning Commission's *Report on Forestry* envisages a raising of species producing pulp for paper, rayon and staple fibre such as eucalyptus, bamboo and *Odai* over an extent of 360 sq. miles by 1983-84.

The Bombay Natural History Society has suggested that without prejudice to the plantation programme in the district as such, the forest blocks at Sengirai, Ammankurichi, Mandiyur and Narttamalai be preserved in their natural state so that the people in the district would have an idea of the type of flora that was native to the area and held away over most parts of it for centuries. The Society has also suggested that the Kasba east block close in Pudukkottai town be turned into a natural forest part, with the indigenous floristics undisturbed, for the enjoyment and instruction of the people of Pudukkottai. Such a protective step will, apart from perpetuating the native botanical species, save a variety of scrub jungle fauna from loss of habitat.

Vegetation of Pudukkottai district.—Dr. B.G.L. Swamy, the eminent botanist and Visiting Professor of Botany in the Presidency College, Madras, undertook an exploratory survey of the floristics of the tract in 1975. His findings are given below followed by a list of important plants occurring in the area as drawn up by him : “The vegetation spectrum of the Pudukkottai district belongs to the same general type as in the bordering areas of Tiruchirappalli, Ramanthapuram and Thanjavur districts. A major part of the hard gravely terrain is covered with sparsely distributed low thorny scrub. In pockets, however, the vegetation becomes denser with an increased frequency of taxon distribution. In Ammankurichi, Sengirai, Tudiamparai and Annavasal, this type of dense vegetation covers an area from one square mile (Tudiamparai) to nearly 20 square miles (Sengirai). Because of the relatively undisturbed character of this vegetation, the floristic composition also is different from areas having sparsely distributed flora.

Dotted here and there are rocky hillocks with abundant plant cover at the foot region. Narttamalai and Piranmalai may be taken as typical examples of this kind. Here interspersed in the scrub occur some arborescent taxa, although they are stunted or dwarfed in habit. The Piranmalai slopes contain some taxa that are not encountered elsewhere in the district : *Helictris isora*, *Derris uliginosa*, *Dalbergia lanceolaria* (also at Narttamalai), *Combretum ovalifolium*, *Osbeckia zeylanica* (also at Narttamalai), *Corallocarpus epigaeus*, *Kedrostis rostrata* (also at Narttamalai),

Diospyros chloroxylon, *Vallaris tinctoria*, etc. In the moist crevices between the boulders grow some Pteridyphytes such as *Cheilanthes* sp., *Heminiotes cordata*, *Petris* sp., three species of *Adiantum*, *Selaginella wightii*, etc. The angiosperm flora in some areas of Piranmalai is so dense that penetrating the vegetation needs blazing new trails.

The general composition of the denser vegetation—floristically as well as numerically—in the plains predominate in thorny taxa. Analytical enumeration of a square mile of vegetation in Sengirai pocket yielded 66 per cent thorny taxa. Many a time the plant cover is impenetrable on account of the dominance of thorny plants rather than the density of growth.

Throughout the plains and often on the hillocks *Euphorbia antiquorum* is an ubiquitous component of the flora. In certain areas this species grows to a height of 7-8 metres, attaining the size and contour of a small tree. It is a common sight to come across as associations of *Toddalia aculeata*, *Gymnema sylvestre*, *Marsdenia volubilis*, *Inchnocarpus frutescens*, *Jasminum auriculatum*, *Cissampelos parora*, *Dichrostachys cinerea* and other climber and twiners submerging *Euphorbia antiquorum*. On the hillocks, the *Wrightia-Jasminum-Memecylon*-association harbouring an orchid taxon or some annual herbs is a common feature.

In contrast, the road-side and cultivated fields present an altogether different cross-sectional picture. Here it is the weeds, taxa that are largely introduced which form the common components and the escape-cultivars dominate the scene. *Croton sparsiflorus*, *Argemone mexicana*, *Passiflora foetida*, *Opuntia* sp., *Celosia argentea*, *Chenopodium murale*, etc., constitute the essential composition of this vegetation ; among the indigenous species may be mentioned the following : *Cardiospermum halicacabum*, *Zornia diphylla*, *Sphenoclea zeylanica*, *Canscora sessiliflora*, *Heliotropium* sp., *Justicia* sp., *Cissus quadrangularis*, etc.

Following the monsoon, rain water collects in the district's tanks. The first aquatic colonizers are *Lemna* and *Pistia* ; Hydrocharitaceous taxa appear later. In some areas the perennating Nymphaeaceae taxa wake up to vegetative activity. The

water-edges predominate in certain semi-aquatic taxa such as *Aeschynomene*, *Jussiaea*, *Lippia*, *Drosera*. On the newly dried up water basins *Coldenia procumbens* spreads like a green carpet.

The maximum utilization of the vegetation is for firewood and charcoal. The Minor Forest Products are next to nothing from the point of view of revenue. The few timber trees that grow are very few in number and because of their stunted growth fall short of the scheduled requirements for utilization. Although the Reserved Forests collect grazing fees, I wonder what the cattle feed on. I have not been able to study grasses during the present survey, but my impression has been that there is a dearth of fodder grasses. The cattle feed on a variety of plant taxa that are leafy and sufficiently juicy in the absence of grasses. The goats also have their share as also human intervention by way of indiscriminate exploitation in upsetting the ecological equilibrium of the scrub. I feel that there are opportunities to increase the areas of pasture lands by planting fodder grasses particularly in Kulattur and Tirumayam taluks.

Young twigs of *Alangium* are woven into strong durable baskets especially suited for earth work. I examined the products at several centres in Tirumayam taluk and feel that this industry is worth encouragement. I suggest this alternative in view of the fact that this species never attains the size of a tree to be utilized as timber.

Species of *Opuntia* were introduced into India in the late 18th and early 19th centuries. These plants had a phenomenal spread throughout the drier parts of India. Pudukkottai district was no exception to this. The spread was facilitated by the use of these plants for fencing the cultivated fields. The Government Botanists and the Officers of the Botanical Survey of India during the early decades of the 20th century speak of the *Opuntias* as forming a characteristic component of vegetation of the Ramnad-Pudukkottai terrain. In recent years, another introduced plant, *Prosopis spici-gera*, has replaced *Opuntias* so much so that a cross-section of the flora dominates in *Acacia planifrons*-*Euphorbia antiquorum*-*Prosopis spicigera* landscape."

List of Important Plants.

(The plant names given below are those adopted in J.S. Gamble's *Flora of the Presidency of Madras*: subsequent nomenclatural and taxonomic changes have not been incorporated so that the plants can be readily identified with the help of Gamble's compendium. Agricultural crop plants are not included in the list).

DICOTYLEDONAE.**Annonaceae :**

- Annona squamosa* (run wild).
Polyalthia pendula (cultivated).

Menispermaceae :

- Cissampelos pareira*.
Cocculus hirsutus.
Tillacora acuminata (no common)

Nymphaeaceae :

- Nymphaea stellata*.
N. pubescens.
Nelumbium speciosum.

Papaveraceae :

- Argemone mexicana*.

Capparidaceae :

- Gynandropsis pentaphylla*.
Cleome monophylla.
C. viscosa.
C. tenella.
Crataeva religiosa.
Cadaba indica.
Capparis brevispina.
C. zeylanica
C. sepiaria

Violaceae :

- Ionidium suffruticosum*.

Flacourtiaceae

- Flacourtia sepiaria*.

Polygalaceae :

- Polygala chinensis*.
P. rosmarinifolia.

Caryophyllaceae :

- Polycarpha corymbosa*.

Portulacaceae :

- Portulaca pilsa*
P. quadrifida.
P. tuberosa.



Elatinaceae :

- Bergia aestivosa*,
B. capensis.

Guttiferae :

- Calophyllum inophyllum* (cultivated).

Malvaceae :

- Malvastrum coromandellianum*,
Sida cordifolia,
S. vernonicaefolia
S. spinosa,
S. rhombifolia,
Abutilon crispum,
Malachra capitata,
Urena lobata,
U. sinuata,
Pavonia zeylanica,
P. procumbens,
Hibiscus vitifolius,
H. trionum,
Thespesia populnea.

rculiaceae :

- Delcetri isora* (Pirannalai),
Melochia corchorifolia,
Waltheria indica.

Tiliaceae :

- Berrya ammonilla*,
Grewia obtusa,
G. orientalis,
G. villosa,
G. hirsuta,
G. rotundifolia,
Triumfetta rhomboldea,
T. rotundifolia,
Corchorus acutangulus,
C. fascicularis.

Linaceae :

- Hugonia mystax* (hilly tracks).

Zygophyllaceae :

- Tribulus terrestris*.

Geraniaceae :

- Oxalis corniculata*,
Biophytum sensitivum (rare, Narttamalai).

Rutaceae :

- Glycosmis cochinchinensis*,
Feronia elephantum,
Aegle marmelos,
Toddalia acuminata.



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Berberaceae :

- Commifera berryi.*
C. caudata.

Meliaceae :

- Azadirachta indica.*

Lacaceae :

- Ola scandens.*
Cusjera rheedii.

Opiliaceae :

- Opilla amentacea.*

Celastraceae :

- Gymnosporia emarginata.*

Bhamnaceae :

- Ventilago madaraspata.*
Colubrina asiatica.
Zizyphus xylocarpus.
Z. oenoplia.
Z. jujuba.
Scutia myrtina.

Vitaceae :

- Cissus setosa.*
C. quadrangularis.
C. vitiginea.
Cayratia carnosa.

Sapindaceae :

- Cardiospermum halicacabum.*
Dodonaea viscosa.
Allophylus serratus.
Ispisanthes tetraphylla.
Sapindus emarginatus.
Schleichera triflora.

Anacardaceae :

- Odina woder.*
Mangifera indica.
Buchanania lanzan.
Anacardium occidentale.

Moringaceae :

- Moringa oleifera (cultivated).*

Leguminosae-Papilionatae :

- Zornia diphylla.*
Strylosanthes mucronata.
Aeschynomene indica.
Pseudarthria viscida.
Alysicarpus hamosus.



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A. bupleurifolius.
A. hamosus.
A. vaginalis.
Desmodium gangeticum.
D. triflorum.
Psoralea corylifolia.
Derris uliginosa (Piranmalai).
Pongamia glabra (? planted).
Rothia trifoliata.
Heylandia latbrosa.
Crotalaria prostrata.
C. retusa.
C. verrucosa.
C. biflora.
Abrus precatorius.
Canavalia virosa.
Erythrina indica.
Butea frondosa (B. monosperma)
Medicago denticulata.
Rhynchosia aurea.
R. viscosa.
Clitorea ternata.
Sesbania aculeata.
S. grandiflora (cultivated).
Indigofera aspalathoides.
I. enneaphylla.
I. glabra.
I. viscosa.
I. tinctoria (run wild).
Tephrosia hirta.
T. procumbens.
T. purpurea.
Dalbergia lanceolaria (Narttamalai, Piranmalai).

Leguminosae—Caesalpinioideae :

Bauhinia racemosa.
Caesalpinia coriaria.
C. crista.
C. pulcherrima.
Peltaphorum ferrugineum (planted).
Pterolobium indicum.
Delonix purpurea (planted).
D. elata (planted).
Cassia fistula.
C. marginata.
C. hirsuta.
C. occidentalis.
C. sophera.
C. tora.
C. elata.



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C. obtusa.
C. pumila.
Tamarindus indica (planted).
Rhynchosia cana.
R. suaveolens.

Leguminosae Mimosoideae :

Neptunia oleracea.
N. triquetra.
Mimosa pudica (run wild).
M. hamata.
Desmanthus virgatus (naturalized).
Leucaena glauca (cultivated).
Prosopis spicigera (run wild).
Dichrostachys cinerea.
Acacia caesia.
A. sundra.
A. leocuphloea.
A. planiformis.

(A few more species which could not be determined for want of proper materials).

Enterolobium saman (planted).
Pithecolobium dulce (planted)
Albizia lebbek.
A. amara.

Saxifragaceae :

Vahlia oldenlandioides.
V. villosa.

Crassulaceae :

Bryophyllum pinnatum .

Proseraceae :

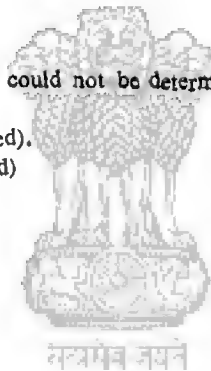
Drosera burmanni.
D. indica.

Combretaceae :

Terminalia arjuna (rare)
T. belerica (Piranmalai)
Calycopteris floribunda.
Combretum ovalifolium (Piranmalai)
Quisqualis indica.
Anogeissus latifolia (Piranmalai)

Myrtaceae :

Psidium guajava (run wild in some places).
Eugenia bracteata (? Planted).
Syzygium jambolanum.
Couroupita guianensis (planted)



Melastomaceae :

- Memocylon umbellatum* (grows to the size of a small tree in Piranmalai).
Osbeckia zeylanica (Piranmalai)

Lythraceae:

- Rotala verticillaris*.
R. indica.
R. densiflora.
Ammania octandra.
A. baccifera.
Nesaea lanceolata.
Lawsonia inermis (cultivated).

Onagraceae :

- Jussiaea repens*.
Ludwigia parviflora.

Turneraceae :

- Turnera ulmifolia* (Old Palace ground).

Passifloraceae :

- Passiflora foetida* (naturalized weed)

Caricaceae :

- Carica papaya* (cultivated).

Cucurbitaceae :

- Mormodica diolca*.
M. charantia.
Bemincasa hispida (cultivated)
Bryonopsis laciniosa.
Cucumis pubescens.
C. callosus.
Citrullus colocynthus.
C. vulgaris.
Coccinia indica.
Cucurbita maxima (cultivated).
Coratlocarpus epigaeus (Piranmalai).
Kedrostis rostrata (Piranmalai and Narttamalai)

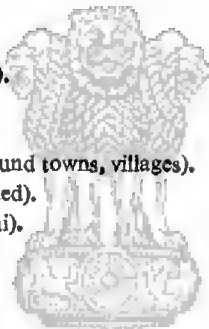
Cactaceae :

- Cereus ? hexagonus* (cultivated).
Opuntia dillini.
O. vulgaris. } (run wild from cultivated).

Aizoaceae :

- Sesuvium portulacastrum*.
Trianthema decandra.
T. triquerta.
Mollugo oppositifolia.
M. nudicaulis.
M. pentaphylla.
Gisekia pharnaceoides

Umbelliferae :*Centella asiatica.***Alangiaceae:***Alangium salvifolium.***Rubiaceae :***Dentella repens.**Oldenlandia shuteri* (Pudukkottai town environs).*O. alata.**O. crystallina.**O. corymbosa.**O. umbellata.**O. stricta.**Chomelia* (*Torennia*) *asiatica.**Randia malabarica.**R. dumetorum* (rare).*Ixora parviflora.**Pavetta indica.**Plectronia parviflora.**P. didyma.**Morinda citrifolia.**Hydrophylax maritima.**Borreria hispida.***Compositae :***Lactuca runcinata.**Launnaea pinnatifida.**Acanthospermum hispidum.**Synedrella nodiflora.**Tridax procumbens.**Xanthium strumarium.**Grangea maderaspatana.**Vicoa indica.**Epaltes pygmaea.**E. divaricata.**Blumea bifoliata.**Eclipta alba.**Ageratum conyzoides.**Eupatorium odoratum* (run wild near Railway line)*Erigeron asteroides.**Sphaeranthus indicus* (fallowed fields).*Emilia sonchifolia.**Tegetes erecta* (cultivated).**Campanulaceae :***Sphenoclea zeylanica.***Plumbaginaceae :***Plumbago zeylanica.***Myrsinaceae :***Aegiceras corniculatum* (rare).

Sapotaceae :*Bassia longifolia* (especially near temples).*Mimusops hexandra*.**Ebenaceae :***Maba buxifolia*.*Diospyros chloroxylon* (Piranmalai).**Oleaceae :***Nyctanthus arbor-tristis* (cultivated).*Jasminum auriculatum*.*J. sessiliflorum*.*J. angustifolium*.**Salvadoraceae :***Azima tetracantha*.*Salvadora persica*.**Apocynaceae :***Carissa spinarum*.*C. carandas*.*Thevetia nerifolia* (cultivated).*Cerbera manghas* (rare).*Rauwolfia canescens* (rare).*Lochnera rosea* (run wild around towns, villages).*Ervatamia coronaria* (cultivated).*Vallaris solonacea* (Piranmalai).*Wrightia tinctoria*.*Ichnocarpus frutescens*.*Nerium odoratum* (cultivated).**Asclepiadaceae :***Sarcostemma brevistigma*.*Caralluma indica*.*C. attenuata*.*Hemidesmus indicus* (rocky hillocks).*Calatropis gigantea*.*Ceropegia bulbosa* (rare).*Pergularia extensa*.*Leptadenia reticulata*.*Gymnema sylvestre*.*Pentstemon microphylla*.*Marsdenia volubilis*.**Loganiaceae :***Strychnos nux-vomica*.*S. potatorum*.*S. sp.* (Piranmalai, under terminated liane).**Gentianaceae:***Limnanthemum cristatum**Exacum pedunculatum* (rare).*Enicostemma littorale*.*Canscora sessiliflora*.*Hoppea dichotoma*.

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Hydrophyllaceae:*Hydrolea zeylanica.***Boraginaceae:***Trichodesma indicum.**Coldenia procumbens.**Cordia myxa.**Erhetia microphylla.**E. ovalifolia.**E. pubescens.**Heliotropium indicum.**H. bracteatum.**H. zeylanicum.**H. scabrum.***Convolvulaceae:***Cuscuta chinensis.**Cressa cretica.**Evolvulus alstnoides.**E. nummularius* (introduced and run wild).*Rivea hypocreteriformis.**Quamoclit angulata* (cultivated).*Ipomaea calycina.**I. repens**I. staphylinia.**I. sepiaria.**I. pes-caprae.**I. pes-tigridis.**Merremia aegyptia.**M. emarginata.**M. tridentata.*

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Solanaceae:*Datura fastuosa.**D. metel.**Solanum nigrum* (escape from cultivated).*S. torvum.**S. melongena* (cultivated).*S. trilobatum.**Physalis minima* (Piranmalai).**Scrophulariaceae:***Moniera cuneifolia.**M. floribunda.**Scoparia dulcis**Striga lutea.**S. euphrasioides.**Stemodia viscosa.**Limnophila gratioloides.**Sopubia delphinifolia.**Vandellia crustacea.**Dopatrium nudicaule.*

D. lobelioides.
Ilysanthes parviflora.
I. minima.
I. serrata.

Lentibulariaceae:

Utricularia flexuosa (Piranmalai).
U. wallichiana (Piranmalai).

Bignoniaceae:

Millingtonia hortensis (Planted).
Kigelia Pinnata (planted).
Bignonia megapatomica (planted).
Spathodia campanulata (planted).

Pedaliaceae:

Martynia annua.
Pedallium murex (around habitations).
Sesamum prostratum.

Acanthaceae:

Elytraria acaulis.
Blepharis boerhaaviaefolia.
B. molluginifolia.
Asteracantha longifolia.
Ruellia prostrata.
R. patula.
R. tuberosa (Piranmalai, Narttamalai).
Stenosiphontum confertum (Piranmalai).
Andrographis paniculata.
A. chioides.
Barleria prionites.
Asystasia gangetica.
Lepidagathis cristata.
Rungia repens.
Ecballium linneanum.
Justicia glauca.
J. salsoloides.
J. Vahlil.
J. prostrata.
Adathoda vasica.
Rhinacanthus communis.
Crossandra undulataefolia (cultivated).

Verbenaceae:

Stachytarpheta indica.
Lantana camara (introduced and run semi-wild).
Lippia nodiflora.
Vitex negundo.
Premna corymbosa.
Gmelina asiatica.
Clerodendron inerme

Labiatae:

Leonotis nepetaefolia.
Geniosporum prostratum.
Ocimum basilicum.
O. catum.
O. sanctum (cultivated).
Orthosiphon glabratum.
Hyptis suaveolens.
Antismeles indica.
A. malabarica.
Leucas aspera.
L. Linifolia.
L. hirta.
L. biflora.

Nyctaginaceae:

Mirabilis jalapa (towns and habitations).
Boerhaavia diffusa.

Amarantaceae:

Aerva lanata.
A. monsoniae.
A. tomentosa.
Celosia argentea.
C. polygonoides.
Amarantus spinosus.
A. viridis.
A. polygamus.
Allamania nodiflora.
Digera arvensis.
Pupalia lappacea.
P. orbiculata.
Achyranthes aspera.
Psilostachys sericea.
Alternanthera triandra.
Gomphrena globosa.
G. decumbens.

**Chenopodiaceae:**

Basella rubra (cultivated).
Anthrocnemum indicum.
Suaeda nodiflora (coastal).
S. maritima (coastal).
Atriplex repens.
Chenopodium murale (introduced and run semi-wild)

Phytolaccaceae:

Rivinia humilis.

Polygonaceae:

Polygonum plebejum.
Antigonon leptopus (cultivated)

Aristolochiaceae:

*Aristolochia bracteata.**A. indica.*

Lauraceae:

*Cassytha filiformis.**Litsaea chinensis* (Pirannalai).*L. sebifera* (Pirannalai).

Euphorbiaceae:

Euphorbia tirucalli (cultivated).*E. antioquorum.**E. hirta.**E. microphylla.**E. thymifolia.**E. prostrata.**E. rosea.**E. hypericifolia.**E. corrigioides* (rare).*Pedilanthus tithymaloides.**Hemicyclia sepiaria.**Oleistanthus collinum.**Fluggea leucopyrus.**Phyllanthus simplex.**P. madaraspatensis**P. rotundifolius.**P. niruri.**Kirganelia reticulata.**Embilca Officinalis* (Pirannalai).*Bryenia rhamnoides.**Givostia rottleriiformis* (Pirannalai).*Jatropha glandulifera.**J. curcas.**Chrozophora rottleri* (Pirannalai).*Croton sparsiflorus.**Tragia involucrata.**T. cannabina.**Ricinus communis* (cultivated).*Acalypha indica.**Micrococca mercurialis.**Sebastinia chamaelea*

Moraceae:

Ficus glomerata (Pirannalai).*F. hispida.**F. retusa.**F. bengalensis.**F. religiosa.**Plecospermum spinosm.**Streblus asper.*

Urticaceae—

Pouzolzia indica (Piranmalai).

Casuarinaceae—

Casuarina equisetifolia (cultivated).

MONOCOTYLEDONAE.

Hydrocharitaceae—

Hydrilla verticillata.

Ottelia alismoides.

Vallisneria spiralis.

Blyxa octandra.

Orchidaceae—

Habenaria platyphylla.

H. viridiflora.

Eulophia epidendrea.

Amaryllidaceae—

Crinum deflexum.

Curculigo orchioides.

Agave sp. (cultivated).

Dioscoreaceae—

Dioscorea pentaphylla.

D. oppositifolia (Piranmalai).

Liliaceae—

Asparagus racemosus.

Gloriosa superba.

Sansveria roxburghiana.

Aloe vera.

Iphigenia indica.

Chlorophytum tuberosum (Piranmalai)

Urgenia coromandellana.

Scilla indica.

Pontederiaceae—

Elchhornia crassipes.

Monochoria vaginalis.

Xyridaceae—

Xyris pauciflora.



सत्यमेव जयते

Commelinaceae—

- Cyanotis fasciculata.*
C. cristata.
Commelina bengalensis.
C. attenuata.
C. paleata.
Murdannia nudiflora.
Anellema vaginatum.
A. nudiflorum.

Palmae—

- Calamus rotang* (Piranmalai).
Phoenix sylvestris.
P. humilis.
P. sartinifera.
Borassus flabellifer (Piranmalai).

Pandanaceae—

- Pandanus tectorius.*

Typhaceae—

- Typha angustata.*

Araceae—

- Pistia stratiotes.*
Typhonium divaricatum.
T. wightii.
Colocasia esculenta (cultivated).

Lemnaceae—

- Lemna paucicostata.*
Wolffia michellii.

Alismaceae—

- Limnophyton obtusifolium.*

Najadaceae—

- Potamogeton indicus.*
Aponogeton monostachyon.

Eriocaulaceae—

- Eriocaulon sieboldianum.*
E. quinquangulare.

Cyperaceae—

- Cyperus procerus.*
C. tegetum.
C. corymbosus.
C. arenarius.

C. rotundus.
C. compressus.
C. aristatus.
C. pumilis.
Mariscus dregeanus.
Kyllinga monocephala.
K. triceps.
Pycreus nitens.
P. capillaris.
Fimbristylis ferruginea.
F. spathacea.
F. dichotoma.
F. diphylla.
F. monostachya.
Stenophyllus barbata.
Eleocharis capitata.
Scirpus squarrosus.
S. articulatus.

Fauna.—In the following paragraphs an account is given of the more important vertebrate fauna in the district¹. It is based on the description of the faunal characteristics of the erstwhile Pudukkottai State contained in *A Manual of the Pudukkottai State* Volume I, (1938) as prepared by K. R. Srinivasan and T. S. Sundaram, former curator of the Pudukkottai State Museum. The *Manual* text has, quite naturally, had to be brought up to date and, wherever necessary, corrected². For reasons of space invertebrates have been left out of the narrative. Needless to say, the peninsular distribution of insects applies to the district. As such no detailed list of the area insects fauna has been given. An account of butterflies of the region prepared by S. T. Satyamurti³ has, however, been

1. For an account of the district's fish-fauna see under " Fisheries " in Chapter IV

2. In this task the *Pudukkottai District Gazetteer* has been fortunate enough to get the advice of the naturalist, M. Krishnan. The 1936 *Manual* says, for instance, that the Spotted Tiger Civet (*Prionodon pardicolor*) " is often domesticated ". Krishnan writes on the subject : " This is a bit too ambitious. " The spotted Linsang or Tiger Civet (*Prionodon pardicolor* Hodgson) has a distribution limited to Nepal, Sikkim and parts of Assam. It is also found in Burma and Southern China. Prater says ' This beautiful civet is nowhere common. ' It is most certainly not found in Pudukkottai or anywhere in Peninsular India and though there are instances of its having been tamed, nowhere, not even in its native north-eastern hill-forests, has it ever been ' often domesticated '.

3. S. T. Satyamurti is Director of Museums, Madras, and author of *Descriptive Catalogue of Butterflies in the Collection of the Madras Government Museum*, Bulletin of the Madras Government, Madras, Vol. VII, No. 1, New series (Natural History) 1966.

included. The portions on reptiles and birds are the result of special surveys conducted in 1975 for the *Pudukkottai District Gazetteer* by teams led by R. Whitaker¹ (reptiles) and Salim Ali² (birds).

The district being situated in the lower half of the peninsula, its fauna is typical of the 'Oriental' region within the major division *Arctogaea*.

Butterflies.—Pudukkottai has a fairly rich butterfly fauna. Most species of butterflies occurring in the plains of South India occur also in the Pudukkottai district. The families of butterflies most commonly represented in Pudukkottai are the Papilionidae, the Pieridae, the Danaidae, the Satyridae and the Nymphalidae.

The Papilionidae or Swallow Tails include some of the largest and most brightly coloured species of butterflies found in Pudukkottai. These butterflies are mostly blackish or dark brown with varied markings of blue, green, yellow, red or other colours. The forewings are usually rather produced and elongated and many species have their wings tailed. The habits and methods of flight of the members of this family are very varied. They are mainly found in forest and hilly, wooded regions but the few species that occur in Pudukkottai are common on the plains. The Common Rose, (*Polydorus aristolochiae*), the Crimson Rose (*Polydorus hector*) the Blue Mormon (*Papilio polymenstor*) and the Lime Butterfly (*Papilio demoeus*) are some of the species of this family most commonly occurring in Pudukkottai.

The Pieridae include small to moderate sized butterflies which are almost always some shade of yellow or orange with black markings. Examples of this family found in Pudukkottai are the Yellow Orange Tip, (*Ixias pyrene*) and the Common Emigrant (*Catopsilia crocale crocale*). The orange tips are white or yellow butterflies subject to considerable seasonal variation. The male

¹ Director of the Madras Snake Park Trust, Guindy, Madras-32.

² Dr. Salim Ali (b. 1896), former President of the Bombay Natural History Society and Chairman of the Bird Wing, Indian Board of Wild Life and of the Indian National Section of the International Council for Bird Preservation. He is a Member of Honour of the World Wildlife Fund.

generally bears an orange or yellow special area on the wing. The emigrants are predominantly yellow butterflies with sometimes brown tips to the wings. These are migratory butterflies, but occur in the wet season in Pudukkottai in large numbers.

The Danaids are another well known family of butterflies, species of which are particularly abundant on the plains of India ; they are extremely tough, leathery butterflies possessing an unpleasant odour, but it is this feature that protects them from falling an easy prey of their natural enemies. A familiar example of this family that occurs in Pudukkottai is the Common Indian Tiger Butterfly (*Danais plexippus*), with bright orange-yellow wings striped with heavy black linear bands. Besides this, other species of this family commonly occurring in Pudukkottai are (*Danais chrysippus*) the Plain Tiger (*Danais limniece*), the Blue Glassy Tiger and the common Glossy Black Butterflies popularly known as the Crows (*Euploea core core*). So successful are some of the Danaids in their protective measures that other species often imitate them and thus gain immunity from their enemies.

Another family of butterflies represented at Pudukkottai are the Satyrids, popularly known as the Brown. The Browns are mostly dullbrown or blackish butterflies with short and broad wings, marked above and below with eyelike spots. They keep much to the shade and are quite inconspicuous, seldom venturing out into the open. The Red-disc Bush Brown (*mycalesis oculus*) and the Common Evening Brown (*Melanitis leda*) are two familiar species of this family occurring in Pudukkottai.

Another important family of butterflies that is well represented in Pudukkottai is the Mymphalidae which include the numerous attractive and brightly coloured butterflies with extremely complicated colour patterns, such as the leaf butterflies, the Kaisers, the Nawabs and the Rajahs. The habits and appearance of the species of this family are extremely varied and many of them mimic other species. Among the most common species of this family represented in Pudukkottai, are the South Indian Fritillary (*Argynis hyperbius*), the Common Leopard (*Atella phalantha*), the Danaid Egg Fly (*Hypolimnas missipus*), the Great Egg Fly (*Hypolimnas oolina*) and the Tamil Yeoman (*Cirrochroa theis*) It is interesting

to notice that the female of *Hypolimnas missipus* the Danaid Egg Fly mimics exactly in colour and colour pattern a totally different species, namely the Plain Tiger (*Danais chrysippus*), belonging to a different family altogether. The Curious Dead Leaf or Oak Leaf Butterfly (*Kallima inachus*) in which the underside of the wings resembles a dead leaf in all details, belonging to the family Nymphalidae, is also a familiar species occurring in Pudukkottai.

Reptiles.—A survey and sample collection of reptiles and amphibians was specially carried out in the Pudukkottai district for the *Gazetteer*. The survey lasted from 4th February 1975 to 15th February 1975. The survey team members were Romulus Whitaker, Zahida Whitaker (Assistant Director, Madras Snake Park Trust), and two Irula snake-catchers, Chockalingan and Muthu, Whitaker reports as follows :

“ Representative parts of Pudukkottai were visited and day time and night time collection of reptiles and amphibians carried out. Local farmers, land owners, hide dealers, snake catchers, doctors, etc., were interviewed about local reptile life and this gave us important factual and interesting mythical information.

All the collected and identified specimens are characteristic of dry scrub jungle in South India that has a rainfall of about 35 inches per year. Most of the specimens were released after examination. Those which were preserved are in the Madras Snake Park Collection.

In Pudukkottai the scrub jungles are being cleared rapidly for agriculture and exotic cash crops like eucalyptus. We visited the bits of scrub that still remain, agricultural areas, and the sea-side which represent the typical Pudukkottai terrain. Everywhere scrub jungle, the home of numerous fascinating animals, was being cleared. People assert that the jungle used to be thick and tall. Now that which remains is sparse and the average height is 5 ft. The python and Russells viper, both conspicuous and heavy bodied snakes, suffer from the loss of habitat, as do other specifically jungle reptiles like the star tortoise. In contrast the rice fields make excellent conditions for cobras, kraits and rat snakes.

One hundred and four specimens were collected of 26 genera and 42 species. A list of the specimen collected, plus others not seen but authoritatively recorded for this area follows :

<i>Snake.</i>	<i>Place.</i>	<i>Habitat (where collected).</i>	<i>Local name.</i>	<i>Remarks.</i>
(1)	(2)	(3)	(4)	(5)
Blind snake (<i>Typhlops</i> Near Kayampatti braminus).	..	Farmlands under dirt pile.	சிதம்பரம், கத்திராம்பு	.. .. Common.
Common sand boa (<i>Eryx conicus</i>).	..	Farmlands in open ..	மண்பாம்பு, குளாடைவன்	.. .. Do.
Red sand boa (<i>Eryx</i> <i>Mimisa</i> <i>johnii</i>). Crossing road	.. இகுத்திப்பாம்பு, முன்னுலிப்பாம்பு	.. .. Common ; especially common in sandy places.
Python (<i>Bythion</i> <i>molurus</i>).	Do.	.. Rocky, hilly places	.. மலைப்பாம்பு	.. .. Uncommon ; hunted for skin
Trinket snake (<i>Elaphe</i> <i>Kumapatti</i> <i>helena</i>). Rat hole	.. வெள்ளைப்பாம்பு, அழகுசர்ப்பம்	.. .. Uncommon.
Rat snake (<i>Ptyas</i> <i>Puthur</i> <i>mucosus</i>). Do.	.. சாராப்பாம்பு	.. .. Very common; hunted for skin.
Kukri snake (banded) (<i>Oligodon</i> <i>arnensis</i>). Old house	.. சவரோட்டிப்பாம்பு	.. .. Common in cool months.
Kukri snake (<i>Oligodon</i> <i>Kiliyur</i> <i>taenclurus</i>). Crossing road	.. சூலை, கண்டங்கரவழி (குக்குலிப்பாம்பு)	.. .. Common after dark.
Bronzeback tree snake (<i>Dendrelaphis</i> <i>tristis</i>). In tree <i>Acacia</i> sp.	.. கொம்பேறிமூக்கன்	.. .. Common.
Wolf snake (<i>Lycodon</i> <i>Siriurus</i>). Crossing road	.. தாம்பாம்பு	.. .. Common after dark.
Wolf snake (<i>Lycodon</i> <i>auicus</i>). Old house	.. யோ	.. .. Common in cool months.

Snake.	Place.	Habitat (where collected).	Local name.	Remarks.
(1)	(2)	(3)	(4)	(5)
Checked keelback water snake (<i>Xenochrophis piscator</i>).	Pudukkottai town ..	Small pond ..	தண்ணீர் பாம்பு ..	Very common ; hunted for skin.
Striped keelback (<i>Amphisma stolonius</i>).	Mimisal ..	Thick grass ..	நீக்கத்தாருட்டி ..	Very common.
Olive keelback water snake (<i>Atretium schistosum</i>).	Near Kayampatti ..	Small pond ..	நீர் நாகம், கோழிப்பம்பு (தண்ணீர்பாம்பு) ..	Do.
Cat snake (<i>Boiga trigonata</i>).	....	Anywhere ..	பூனைப்பாம்பு (ஓலைக்கருட்டை) ..	Common.
Vine snake (<i>Ahaetulla nasutus</i>).	Pudukkottai ..	Tree ..	பச்சைப் பாம்பு ..	Very common ; hunted for skin.
Bog faced water snake (<i>Cerberus rhynchops</i>).	....	Saline creeks ..	தண்ணீர்ப்பாம்பு (நாய்லுக்குத் தண்ணீர்ப்பாம்பு).	Common.
Common krait (<i>Buagrus caeruleus</i>).	Sittannavasal ..	Farmlands rat hole ..	கட்டுவிரியன் ..	Do.
Cobra (<i>N.n.naiia</i>).	Near Kayampatti ..	Farmlands under dirt.	நல்லாம்பு ..	Common; hunted for skin.
Russells viper (<i>Vipera russelli</i>).	New palace grounds, Pudukkottai.	Thick grass scrup and roog piles.	கண்ணாடிவிரியன் ..	Very common; hunted for skin (seven collected here).
Saw scaled viper (<i>Echis carinatus</i>).	New town.	Pudukkottai Crossing road ..	சுருட்டை, ரத்தகருட்டை ஓலைக்கருட்டை ..	Very common; after dark.

In addition to the snakes listed above as collected, observed and likely to occur here from the literature it is likely that the rarely seen coral snake (*Callohis ap.*) is also found here. Two days and a night were spent along the coast from Mimisal to Muthupet. No sea snakes² were observed as no large nets were being used.

The following list includes sea snakes likely to be found here which we have been found to be common in coastal Chengalpattu district : *Enhydrina schistosa*, *Hydrophis cyanocinctus* *Hydrophis spiralis*. *Kerilia jerdoni* *Microcephaloracilis*, *Lapemis curtus*, *Pelamis platurus*.

It is beyond the scope of this report to list all of the herpetofauna of Pudukkottai district but mainly to cover the commonly observed animals of this group, most of which were seen and or collected during our survey.

Lizard.	Places.	Habitat (where collected).	Local name.	Remarks.
(1)	(2)	(3)	(4)	(5)
Forest gecko (<i>Cyrtodactylus</i> .)	Scrub near Pudukkottai town.	Under rock ..	புல்லி ..	Uncommon.
House gecko (<i>Hemidactylus brooki</i>).	Pudukkottai town ..	House rocks ..	வீட்டுப் புல்லி ..	Common.
Rock or termite gecko (<i>Hemidactylus trisdrus</i>).	Pudukkottai town ..	Rocks, termite hills (Puthus).	புத்துப்பல்லி ..	Do.

¹ An unusual evidence of the widespread occurrence of cobras in the Pudukkottai area is found in a Darbar file containing the former Diwan Seshiah Sastri's complaints to the British Political Agent about machinations organised against him by the Junior Rani. In a letter dated 2nd April 1892 the Diwan writes : ".....She had placards struck up threatening me with assassination. She had stones thrown. She made a sacrifice of one hundred cobras hung up by the tail over a fire which was kept up by a flood of ghee.....".

² Harry Miller writes of sea snakes (*Indian Express*, 23-8-1975) "all sea-snakes are highly venomous. Their venom is highly toxic, much more dangerous for example, than that of cobras or kraits.....I have often seen fishermen on the Madras coast non-chalantly plucking them from their nets and tossing them back into the sea. On the other hand it would be most unwise for anyone to touch or pick up a sea-snake found on the beach. They are frequently washed up after storms, particularly in the monsoon seasons and are only exhausted or half-dead at most and should be left severely alone."

Serial.	Place.	Habitat (where collected).	Local name.	Remarks.
(1)	(2)	(3)	(4)	(5)
Rock gecko (<i>Hemidecetylus reticulatus</i>).	Sittannavasal ..	Caves ..	.. .. மலைப் பக்கம்	.. .. Common.
Iree gecko (<i>Hemidecetylus leachenaudi</i>).	Pudukkottai town ..	Trees on road side ..	.. .. மரப் பக்கம்	.. .. Do.
House gecko (<i>Hemidecetylus frenatus</i>).	Do.	Guest House ..	.. .. வீட்டுப் பக்கம்	.. .. Do.
Green garden lizard (<i>Calotes calotes</i>).	Do.	Trees, large bushes ..	.. .. குளம் ..	.. .. Do.
Garden lizard (<i>Calotes variscolour</i>).	Do.	Do.	.. ..	.. .. Very common.
Sita's lizard or bearded lizard (<i>Sittana-ponticouriana</i>).	Sittannavasal ..	Open dry areas, small thorny bushes.	.. ..	.. .. Common.
Chamaeleon (<i>Chamaeleon zeylanicus</i>).	....	....	.. .. பச்சை குளம் ..	.. .. Not collected but reported by catchers and others.
Common skink (<i>Mabuya carinata</i>).	Sittannavasal ..	Anywhere (dense cover).	.. .. அங்கு	.. .. Very common.
Bronze skink (<i>Mabuya macularia</i>).	New Palace, Pudukkottai.	In debris, leaves, etc.	.. .. மரப்பாசா	.. .. Uncommon.
Lined skink (<i>Mabuya sibron</i>).	Mimisal ..	Beach sand thorny grass.	.. ..	.. .. Common.
Short-legged skink (<i>Riopa punctatus</i>).	Kayampatti ..	Leaf debris ..	.. ..	.. .. Uncommon.

Racerunner (<i>Ophisops jerdoni</i>).	Sittannavasal	..	Open bars rocks, hills.	இடி .. .. .	..	..	Common.
Monitor lizard (<i>Varanus bengalensis</i>).	New Palace, Pudukkottai.	....	Hiding in leaf debris below dense bush.	உருபு .. .. .	..	..	Common ; hunted for skin.
Tortoise/Turtle : Olive Ridley's Sea turtle (<i>Lepidochelys olivacea</i>).	....	....	....	கடல் ஆமை .. .. .	..	..	Though not seen fishermen report that sea turtles nest on the coast here ; probably Ridley. The other two are often caught in Tuticorin and are likely to occur in Pudukkottai coastal waters.
Green sea turtle (<i>Chelonia mydas</i>).	....	....	....	கடல் ஆமை .. .. .	..	..	Though not seen fishermen report that sea turtles nest on the coast here ; probably Ridley. The other two are often caught in Tuticorin and are likely to occur in Pudukkottai coastal waters.
Hawksbill sea turtle (<i>Eretmochelys imbricata</i>).	....	....	....	கடல் ஆமை .. .. .	..	..	Do.
Star tortoise (<i>Geochelone elegans</i>).	Scrub near Pudukkottai town.	..	Half hidden beneath thorny bush.	(எட்புளினிகாட்) காட்டுமரங்கள் .. .. .	..	..	Common.
Black terrapin (<i>Geomydas trijuga</i>).	New Palace at Pudukkottai.	..	Under earth and leaves.	சுல் ஆமை, பாம்பாச் ஆமை, வெள்ளாமை. கருப்பு ஆமை. .. .. .	..	..	Common ; hunted for meat.
Soft shell turtle (<i>Lissemys punctata</i>).	Do.	Do.	Do.	வெங்கல் ஆமை .. .. .	..	..	Do.

1. A Corruption of *Parasaurinae* from the *சூரனை* being snake in its movement.



The snake skin trade in Pudukkottai.

Photo : R. Whitaker

Other frogs not seen but likely to occur in the district are the (a) Short headed frog (*Rana Braviceps*); (b) Painted frog (*Kaloula pulchra taprobanica*); and (c) Red small-mouthed frog (*Microhyla rubra*).

Reptiles and Economics.—Upon reaching Pudukkottai we made contact with professional snake catchers, for assistance in collecting and to get their impressions of commonness of reptiles, local snake names, etc.

Ardekam of Melakayampatti village near Pudukkottai town is the only snake catcher in his village. So has developed a name locally, and gets reports of snakes seen by the villagers. We also met Mayar and Andi, of the Ambalakarar caste, who spend almost half their time hunting snakes for skin. Their village of Kumapatti consists of 200 huts; most of the adult men are at least part time snake catchers and for 20 of them it is a full time occupation. We noticed that these men are not nearly as meticulous and skilful in their hunting techniques as the Irulas of Chengalpattu district and they rely more on information from farmers and local people than their own ability to find the tracks and den of a snake. They dig out snakes with 'mumpatty' and crow bar and catch non-venomous ones (mainly rat snakes and water snakes) by hand and break the neck. Poisonous snakes (mainly Cobra and Russells viper) are pinned with a short stick. The skins are carefully salted to await the Friday skin market.

We visited the skin market one Friday. There were thousands of raw, fresh salted snake skins in five huge stacks. Upon interviewing a buying agent from a large Madras leather company, we found that he sends about 5,000 skins to Madras each week. In the dry season Russells vipers are more plentiful and in the wet season cobra and rat snakes take over. From 1962 to 1968 there was a boom in the snake skin industry and this agent was sending 20,000 skins each week. Fortunately the Government has made a quota system which at least partially controls the killing of snakes. There are three skin dealers who buy skins every week at the Pudukkottai market.

The current skin rates are as follows :

	RS.
Cobra 5 inches width ..	5.50
Rat snake 6 inches width ..	6.00
Russells viper each skin ..	2.50
Water snake Do. ..	0.70
Python per foot	2.50
Monitor lizard each skin	0.50

It is impossible to ascertain the impact of this large scale killing of snakes on the agro-economy of the district but it appears that killing off these major rat controllers is detrimental.

The snake skin industry supports numbers of otherwise unemployed tribals and villagers but can only be justified if studies are undertaken to determine to what extent it can continue, and how much pressure the snake population can withstand. All utilization of wildlife must be on a sustained yield basis, or farmed.

There were numerous python skins in the market, including two twelve foot ones. (Pythons are protected under the Wild Life Act of 1972 as they have been wiped out from many places for the skins.)

As almost everywhere in India, there are fake 'snake catchers' who tell you your compound is full of snakes and proceed to "catch" as many as 30—40 snakes, within half an hour. These snakes are brought along by the 'snake catchers' themselves, and you paying for sleight of hand.

The frog leg industry is well developed in Pudukkottai and very active in the rainy season. This affects mainly *Rana tigrina* and *Rana hexadactyla*, both valuable insect eaters.

People's attitude to Reptiles.—There is no fear of the monitor lizard (Udumbu) and many people will take the meat if available. The same goes for the soft-shell turtle (Vellaamai) and black terrapin (Karuppammai). People do not fear the garden lizard but think the bite of a shink (Aranai) is venomous. They wrongly

believe that a gecko or its faeces will poison food. As usual people¹ fear snakes and a snake is almost always killed on sight. Most people here however, realize that rat snakes and water snake are harmless and some farmers express the enlightened opinion that rat snakes are valuable rat controllers.

Snake-bite.—There was little mention of snake-bite among village people and the Government Hospital in Pudukkottai town reports very little mortality. They receive a yearly average of only 10 units of polyvalent antivenom serum from the Haffkine Institute in Bombay; enough to treat only few serious snake bites. Of course most snake bite cases do not come to hospital. As elsewhere in India the majority of bites are on the feet and most of the victims farmers and field workers. They usually go for treatment to local men with a reputation for healing by mantra and or herbal preparations. Since roughly 90 per cent of snake bites are not fatal anyway, these men get good reputation as “healers”, it is obvious that the most important course to follow in case of a serious snake bite is to get antivenom serum as soon as possible, which is available at all Government Hospitals. If this consciousness was prevalent among the people, it would reduce snake bite to insignificance.

There are no returns as yet from Pudukkottai district but in 1969 there were 248 snake bites and 5 deaths in Tiruchirappalli District Hospitals. It is estimated that only one-tenth of snake

¹ Akilan, the Pudukkottai-born Tamil novelist writes in an autobiographical narrative (Deepam, March 1973.)

“கற்றுழைக்காடுகள் திடீர் திடீரென சரிந்து விழுந்த தொடங்கவே, ஹரெல்லாம் பாம்புகள் இழையத் தொடங்கின. தேக்காட்டோடு பாம்புகள் என் கண்களில் படாத நாள் குறைவுதான். நல்ல பாம்பு, சாரைப்பாம்பு, விரியன் பாம்பு, பச்சைப்பாம்பு இப்படிப் பலவகைப் பாம்புகளைப் பலவகைத் தோற்றங்களில் நான் கண்டிருக்கிறேன். நல்ல பாம்பு தவளையை விழுங்கிவிட்டு வேகமாக நகர முடியாமல் வழியில் படுத்துக் கிடக்கும். நான்கடிக்குமேல் நீளமுள்ள கருநாகம் வெகு வேகமாகக் குறுக்கே பாயும். பச்சைக் கொடியோடு கொடியாகப் பச்சைப்பாம்பு ஊசலாரும், சாரையும் சாரையும் ஒன்றை ஒன்று பின்னிக்கொண்டு, தடிக்குச்சி போல் தரைக்குமேல் எழும்பி நிற்கும். சாரைப்பாம்பின் காதல் நாடகம் அற்புதமானதொரு காட்சி.

வரியில் எவ்வளவோ வகையான பறவைகள். இவற்றில் முக்குளிப்பான் பறவைதான் அதிகம். நீரில் ஒரு பக்கம் தலையை விட்டு முக்குளித்த பிறகு வெகு தொலைவு கடந்து தலையைத் தூக்கும். வரிக்குள் இறங்கிவிட்டால் குறவட்டைகளில் தொல்லை அதிகம். குறவட்டை என்ற அட்டையை நீங்கள் பார்த்திருக்கிறீர்களா? சிறிய பிளாஸ்டிக் துண்டுபோல் இருக்கும். நீரில் அது நீண்டு கொண்டே செல்லும். காலில் அது கடித்துவிட்டால் எவ்வளவு ரத்தத்தை உறிஞ்ச முடியுமோ அவ்வளவையும் உறிஞ்சிக் கொண்டதான் அது தானாகக் கீழே விழும். யாராவும் அதைப் பிடுங்கி அறியவே முடியாது. கைவழுக்கும். புகையிலை எச்சில் போட்ட வர்கள் கடிக்கும் இடத்தில் துப்பிலுதான் அது தன்னால் விழும். எனக்கு அந்த அட்டை யிடம் ஒரே அருவருப்பு. வரி நீரில் நீந்தி இளைக்க எனக்கு எவ்வளவோ ஆசை இருந்தாலும் இந்த அட்டைக்கும் பயந்து கொண்டே நான் வரியில் குளிப்பதில்லை.

bite cases come to the hospital so the fatalities are probably considerably more than the above. If the effectiveness of anti-venom was publicized there would be very few snake bite deaths.

Beliefs.—The Common myths and beliefs about reptiles are similar to those you might hear elsewhere in South India. Most of these false stories revolve round the cobra; for example that it—

- (a) grows hair and gets shorter as it ages ;
- (b) drinks milk and ‘dances’ to certain tunes ;
- (c) is attracted and repelled by certain flowers, roots and plants ;
- (d) has a jewel or light (manickam) in its head ;
- (e) does not go into water ;
- (f) follows the killer of its mate to take revenge ;
- (g) mates with the rat snake (Sarai Pambu) ;
- (h) People refer to cobra as ‘Poonagam’ ‘Karunagam’ and ‘Godhmir Nagam’, etc. (These are all colour phases of the same species).

The rat snake is supposed to lash with its tail, and the harmless bronze-back tree snake (Komerimurkan), to give a deadly bite and climb a tree to wait for the victim’s funeral pyre.

Then there is the one about the red sand boa having two heads—the tail is blunt like the head, very useful to confuse predators.

A number of harmless snakes are thought to be highly venomous. The non-poisonous striped keelback (Olaipambu) is one of these.

Any small banded snake like the wolf and kukri snake is called ‘Kattuvirayan’ (common krait). The harmless soft nosed vine snake is called ‘Kun-kuthipambu’ (Eye-darter). The common sand boa (Podaiyan) is supposed to give you leprosy. All these myths are of course very detrimental to the snake, specially since there are only four venomous snakes in this district : cobra, krait, Russells viper and saw-scaled viper.

The usual lizard myths are prevalent : (a) monitor lizard meat gives you strength, (b) geckos and skinks are poisonous, and so on

Snake stones are offered to Siva temples in the belief that this pooja will bring children. An example of this is at Paraiyur temple where hundreds of these snake stones can be seen.

It should perhaps be mentioned here that in old British records it is stated that the king cobra and banded krait are prevalent in this district. Both these are found only in much water parts of India so their occurrence in Pudukkottai is a 'myth'."

Birds.—Of the 77 families of birds that comprise the avifauna of the Indian subregion, about 45 have been recorded in Pudukkottai district and/or in immediately adjacent areas. After the monsoon there is a great influx into the district of migrants from beyond Indian limits which spend the winter months here and return to their breeding grounds in the Himalayas and farther north—some even up to the Arctic circle. By about the middle of April most of these winter visitors have departed.

Dr. Salim Ali, the noted ornithologist, visited Pudukkottai district in the summer and winter of 1975 for a study of its avifauna. He was accompanied by J. C. Daniel and S.A. Hussian of the Bombay Natural History Society. Descriptions of the field characters and habits of some of the major birds in the Pudukkottai area, together with a comprehensive list (at the end) giving the scientific names of its resident and migratory birds prepared by the ornithological team, are furnished in the following pages.

The sequence of Orders and Families in the following pages, is that adopted by S. Dillon Ripley in *A Synopsis of the Birds of India and Pakistan* (1961) and which has, by and large, received international acceptance. This modern arrangement starts at the bottom of the evolutionary ladder and works up to the putatively highest developed forms.

M. Krishnan, the Madras-based naturalist, has furnished the Tamil equivalents of the birds' names and the Tamil descriptions and literary references.

Order: PODICIPITIFORMES.

Family, *Podicipitidae* : Grebes.

Small tail-less aquatic birds, the Grebes, or Mukkuli-p-paan (முக்குளிப்பான்) in Tamil, have a sharply pointed bill, and are highly adapted for diving underwater. The legs with partially webbed feet are placed far behind to enable the birds to dive and swim with the greatest ease. The Little Grebe or Dabchick (*Podiceps ruficollis*) is the commonest representative of the family, occurring all over India. It inhabits village tanks and jheels covered with floating vegetation. The suddenness with which a swimming Dabchick disappears under the water when alarmed is astonishing. Its food consists chiefly of water insects and snails.

Order: PELECANIFORMES.

Family, *Pelecanidae* : Pelicans.

Large fish-eating birds, the Pelicans or koozhai-k-kadaa (கூழைக்கடா) in Tamil, have a clumsy looking massive bill. The upper mandible is flat and hook-tipped; the lower supports a large elastic skin pouch which is used to scoop up fish from water as the bird swims into a shoal. The legs are short and stout and the feet fully webbed. Pelicans live in flocks and often hunt by co-operative effort. The Grey or Spotted-billed Pelican (*Pelecanus philippensis*) is the common species.

Family, *Phalacrocoracidae* : Cormorants, Darter.

Cormorants or Neer-k-kaakai, Neer-k-kaagam (நீர்க்காகை, நீர்க்காகம்) in Tamil, are water birds with predominantly black plumage hence often known as Watercrows. They have a strongly hook-tipped bill and a prominent bare gular pouch. The Large Cormorant (*Phalacrocorax carbo*), the Indian Shag (*P. fuscicollis*) and the Little Cormorant (*P. niger*) are commonly found. An excellent diver and fisher, the Large Cormorant in some places is domesticated and trained to catch fish.

The Indian Darter or Snake-bird (*Anhinga rufa*), Paambu-taaraa (பாம்புத்தாரா) in Tamil, is closely related to the Cormorants. It has a narrow head and a characteristically long and thin 'S' shaped neck which sticks like a snake out of the water when the bird is swimming half sub-merged. Its bill is straight and stiletto-like ; its plumage chiefly black with some silvery streaks.

Order: CICONIIFORMES.

Family, *Ardeidae* : Herons, Egrets.

Herons are wading birds with a long neck and long bare legs. The bill is dagger-like, sharp and pointed ; the plumage soft and loose-textured. During the breeding season all species develop filamentous ornamental plumes. They breed in colonies, sometimes in mixed heronries in association with other water birds. Their food consists of fish, molluscs, frogs etc., procured among marshes, jheels and estuaries by walking about in the shallows or sitting inert to jab at any fish blundering within striking range. The Grey Heron (*Ardea cinerea*), White Heron or Large Egret (*Ardea alba*) and Pond Heron or Paddy-bird (*Ardeola grayii*) are the common species. By a local corruption the Grey Heron is called Naaraayanapakshi (நாராயணபக்ஷி). Naraiyaan (நரையான்) is a very old Tamil name, found in the earliest literature. The Pond Heron or Paddy bird is called Madaiyaan (மடையான்), a very old Tamil name which faithfully indicates its habit of haunting small irrigation gutters (மடைகள்) in paddy fields. “வல்லூறடிக்க மடையான் விழுவதுபோல் நீ விழுவாய்” ‘May you fall like the paddy bird before the falcon’s stoop’, is a zestful and old Tamil curse. This bird is also called Kuruttu-k-kokku (குருட்டுக்கொக்கு) or ‘blind heron’ not because it is blind but because it blinds us by looking so like a clod of earth as it sits immobile, hunched and streaky brown, still, in the inimitable EHA’s¹ words, “It suddenly produces a pair of snowy wings from its pockets and flaps away”. American visitors to the Far East used to call this the ‘Surprise Bird’ for the same reason.

¹ Edward Hamilton Aitken (1851-1909), an Indian Civil Servant, is one of our best known humorous naturalist-writers. Author of *A Naturalist on the Prowl*, *Behind the Bungalow* and such other masterpieces, he edited the *District Gazetteer of Sind*.

Among the Egrets, the Cattle Egret (*Bubulcus ibis*) called in Tamil Maattu-kokku (மாட்டுக்கொக்கு) or Unni-k-kokku (உண்ணிக்கொக்கு) is the most commonly met. Two species of the true Egrets, the Median (*Egretta intermedia*) and the Little (*E. garzetta*) are also found. Of snow-white plumage these birds are distinguished by the bill which is yellow in the Cattle Egret, black-and-yellow in the Median and all black in the Little. In the breeding season, the latter two, as also the Reef, have a drooping crest of two narrow plumes. The Reef Egret (*E. gularis*) occurs on the sea coast in two colour phases : (1) dark slaty grey and (2) all-white. The white phase is confusingly like the Little Egret including the black legs and particoloured black-and-yellow feet.

Family, *Ciconiidae* : Storks.

Storks are heavily-built long-legged birds with a long neck and dagger-like bill, chiefly of black-and-white plumage, sometimes with a metallic green, pink and yellow. The Painted Stork (*Mycateria leucocephala*), which is called Sangu-valai-naarai (சங்குவளை நாரை) in Tamil, has a long decurved bill and bare facial skin both of which are bright yellow. The Openbilled Stork (*Anastomus oscitans*) or Naththai-k-kuththi-naarai (நத்தைகுத்தி நாரை) in Tamil, as the name suggests, has a conspicuous gap between the mandibles, the exact purpose of which is not clear. It lives largely on snails.

Family, *Threskiornithidae* : Ibises, Spoonbill.

The White Ibis (*Threskiornis aethiopica melanocephala*) or Kanganam (கங்கணம்) and Aruvaal-mookkan (அருவாள் மூக்கன்) in Tamil, is a white bird with a black unfeathered head and neck. It sports a long, black, downcurved bill. In breeding plumage it shows some slaty grey on the scapulars and wings. At the base of the neck ornamental plumes can be seen. It moves about on marshy land probing the soft mud with its bill opened forcepswise. It can feed in shallow water with the head momentarily submerged, the food consisting of fish, molluscs, reptiles and also some water plants. It lacks a voice but can raise a peculiar ventriloquial grunt when nesting. Its breeding is colonial.



A Median Egret in flight.

Photo : M. Krishnan

The Black Ibis (*Pseudibis papillosa*) or Karuppu-k-kottaan (கருப்புக் கோட்டான்) is a black bird with a long downcurved bill, a white patch near the shoulder and brick-red legs. Its black head has a patch of crimson on the crown. Though often found near tank, the bird is not so dependent on water as the White Ibis. It can feed in the dry stubble of fallow lands around tanks and streams. Parties of Black Ibises fly in V-formation. It utters a loud nasal screaming cry on the wing.

The Spoonbill (*Platalea leucorodia*) or Man -vetti-vaayan (மண் வெட்டி வாயன்) and Chappal-chondaan (சப்பை சச்சாண்டான்) in Tamil, has a long neck and long legs. It is a snow-white bird with black legs and a yellow-brown patch on its foreneck. Its most distinctive feature, however, is its conspicuous spatulate bill, black with a yellow tip. It feeds on tadpoles, frogs, molluscs, insects and vegetable matter among shallow water, into which it wades with its bill partly open, raking up the mud with the tip of the lower mandible.

Order : ANSERIFORMES.

Family *Anatidae* : Ducks, Geese.

Most of our wild Ducks and Teals or Kiluval (கிலுவை) in Tamil are winter visitants from distant places like Turkestan and Siberia. The commonest of them are the Common Teal (*Anas crecca*), the Garganey or Bluewing Teal (*A. querquedula*) and the Pintail Duck (*A. acuta*). These birds frequent marshes and jheels, sometimes feeding on standing paddy crops during the night. The Whistling Teal (*Dendrocygna javanica*) and the Cotton Teal (*Nettapus coromandelianus*) are resident ducks, occasionally migrating seasonally and locally.

Order : FALCONIFORMES.

Family *Accipitridae* : Hawks, Vultures.

Like all birds of prey, the Common Pariah Kite (*Milvus migrans*) or Parundu (பருந்து) and the Brahminy Kite (*Haliastur indus*) or Garudan (கருடன்) have strongly hooked bills and powerful claws which are specially adapted for gripping and tearing prey. The Common Pariah Kite is brown in colour and is distinguished

from similar birds by its tail which is forked. The Brahminy Kite is a bright rusty red above with a white head, neck and breast. Its tail is rounded. Both these kites are commensals of man and useful scavengers since they eat carrion. They are useful also as a check on the populations of farm-pests such as rodents and locusts.

Rather similar to the Kites in their feeding habits are the White Scavenger Vulture or Pharaoh's Chicken (*Neophron percnopterus* known in Tamil as Manju-thirudi (மஞ்சு திருடி) or manjal-thirudi (மஞ்சள் திருடி) and the Whitebacked Vulture (*Gyps bengalensis* known as Kazhugu (கழுகு) or Pinanthinni-k-kazhugu (பிணந்தின்னி கழுகு). The White Scavenger Vulture is of a dirty-white colour with a distinctive naked yellow head and bill. Its favourite food is offal and human excrement which it picks up from the neighbourhood of the human habitations it affects. The Whitebacked Vulture is of a dirty blackish brown colour with a diagnostic white back and a broad broken white band on the underside of its wings. It often feeds in large gatherings assembled competitively over a carcass.

Other birds of prey include the Whitebellied Sea Eagle (*Haliaeetus leucogaster*), the Bonelli's Eagle (*Hieraaetus fasciatus*) and the Booted Eagle (*H. Pennatus*). The Whitebellied Sea Eagle, which frequents the sea coast feeding on fish, crabs, mud-skippers, sea-snakes etc., is known in Tamil as the Aalaa (ஆலா). The word Aalaa is an old but still current name in coastal Tamil. During courtship, the pair indulge in a spectacular aerial display uttering their loud creaky calls. It is from this habit that the Tamil phrase "Aalaa-p-parakkiraan" (ஆலாப்பறக்கிறான்) is derived, to indicate a man restlessly wandering around in an uncoordinated manner, in excitement.

The Harrier (Genus : *Circus*) known in Tamil as the Poonai-parundu (பூனைப்பருந்து) frequents cultivated areas, pouncing from the air on rodents. All Harriers are migrants from Central Asia sojourning in the Peninsula during winter. They have a graceful, effortless sailing flight close to the ground or water surface while hunting. The commonest species are the Marsh Harrier (*Circus aeruginosus*) and the Pale Harrier (*Circus macrurus*).



Whitebelly Sea Eagle.

Courtesy : Bombay Natural History Society

The Shikra (*Accipiter badius*), Chinna-valluru (சின்ன வல்லூறு) in Tamil, a small greyish hawk which frequently takes young chickens from the poultry yard, is commonly found in the neighbourhood of villages.

Family *Falconidae* : Falcons

Diurnal birds of prey that live by hunting birds (chiefly) include the Kestrel (for which no specific Tamil name seems to obtain) and the Laggar Falcon (*Falco biarmicus jugger*) which is called Valluru (வல்லூறு) in Tamil. The Kestrel (*Falco tinnunculus*) which frequents grasslands and open hillsides is best known for its habit of hovering stationary in the air to locate its prey on the ground.

Order: GALLIFORMES.

Family *Phasianidae* : Pheasants, Junglefowl, Partridges, Quails.

These are all terrestrial birds, with short and rounded wings. Their flight, though fast and powerful, cannot be sustained for long distances. They fly off with an explosive whirr of wings, or scuttle from bush to bush when disturbed. Their legs are strong, and their four toes are armed with stout claws that are adapted for scratching earth. Their short and thick bills help them feed on weed, seeds and grains in grassy cultivated areas. The Grey Partridge (*Francolinus pondicerianus*) called Kauthari (கௌதாரி) in Tamil, and the Bush Quail (*Perdica* spp.) called Kaadai (காடை) are renowned as game birds. Illicit netting by local hunters has reduced their populations dangerously.

Also found in the district are the Grey Junglefowl, (*Gallus sonneratii*) Kattuk-k-Kozhi (காட்டுக்கோழி) and Red Spurfowl (*Galloperdix spadicea*). In the Peafowl (*Pavo cristatus*) or the Mayil (மயில்) the male has a gorgeous plumage. Its elongated and brilliantly patterned upper tail-coverts form the celebrated 'tail'. These feathers, shed annually, are used for making fans and other ornamental articles, and are largely exported.

Order : GRUIFORMES.

Family *Rallidae* : Rails, Coots.

A typical member of the swamp-dwelling Rail family is the whitebreasted waterhen (*Amaurornis phoenicurus*), Kaanaang-gozhi (காணாங்கோழி) in Tamil. It is fond of skulking in thickets of *Pandanus* and other scrub plants that grow around village ponds. Its food is mainly confined to aquatic insects. Its plumage is soft and loose-textured ; The upperparts are slaty grey, the face and breast white, and the under tail-coverts rusty red. Legs green ; bill green and red. The Coot (*Fulica atra*) or Naama-k-kozhi (நாமக்கோழி) is a kindred bird, which visits the area in winter. It is greyish black, has lobed toes and an ivory-white frontal shield. Although its wings are short and flight laboured, the Coot can cover long distances on trans-Himalayan migration.

Order : CHARADRIIFORMES

Family *Jacaniae* : Jacanas.

These are long-legged waterfowl with remarkably elongated toes that enable the birds to trip lightly over floating vegetation. They are, besides, accomplished swimmers and divers when occasion demands. The Pheasant-tailed Jacana (*Hydrophasianus chirurgus*) has a sickle-shaped tail during the breeding season. The Bronzewinged Jacana (*Metopidius indicus*) has metallic bronze-green wings. The female is polyandrous in both the species. The male incubates the eggs and tends the chicks.

Family *Charadriidae*Subfamily *Charadriinae* : Plovers.

The Lapwing or Aatkaatti-k-kuruvi (ஆட்காட்டிக்கூருவி) is a wading bird frequenting open areas, grazing grounds, sea coast and freshwater marshes. Its plumage is patterned with brown, grey, black and white. The bill is straight and moderately stout. The Redwattled Lapwing (*Vanellus indicus*) and the Yellow-Wattled Lapwing (*V. malabaricus*) have fleshy lappets in front of the eyes. The former is well known for its distinctive 'di-he-do-it ?'

call. A kindred bird, the Grey Plover (*Pluvialis squatarola*), usually seen on the sea coast, is the largest of the migrating Plovers. The smallest, the migratory Little Ringed Plover (*Charadrius dubius curonicus*) has a resident race *jerdoni* which breeds in this area and is called Chinna-k-kottaan (சின்னக் கோட்டான்).

Subfamily *Scolopacinae* : Curlews, Whimbrel,
Godwits.

A typical example of this wading bird group that inhabits marshes, open lands and the sea coast is the migratory Curlew (*Numenius arquata*) or Kuthiraimalai-k-kottaan (குதிரை மலைக்கோட்டான்). It has a long slender decurved bill. The Curlew's habits are like those of the Lapwing. To the same subfamily also belongs the diminutive Little Stint (*Calidris minutus*) or the Kallu-p-pcrukki (கல்லுப் பொறுக்கி). Though weighing only about twenty grams, it often travels 7,500 kilometres from its breeding grounds in the Arctic tundra to its wintering quarters in the tropics. Large flocks congregate along the coastal belt of Point Calimere-Muthupet-Adhirapattinam-Arantangi where enormous numbers are trapped and sold for food by professional trappers using nylon nooses and nets. A Stint may sell for 40-75 paise and a Curlew for Rs. 1.50 to Rs. 3.00 in the peak season.

Family *Recurvirostridae* : Stilts, Avocets.

As the name implies, the Blackwinged Stilt (*Himantopus himantopus*) or Pavala-k-kaali (பவளக்காலை) has long stiltlike bare red legs, quite out of proportion with the body. They enable the bird to wade into comparatively deep water for food. The Avocet is a similar shaped bird with a slender black upcurved bill. Its pied plumage has much more white in it than the Stilt and its legs are bluish, and shorter. No Tamil name obtains for the Avocet.

Family *Burhinidae* : Stone Plovers.

The Stone Plover (*Burhinus oedicnemus*) is a bare legged cursorial, or running, bird with a large round head and enormous yellow eyes (hence its popular name 'Goggle-Eye'). It keeps singly or in pairs or small parties in stony scrub, feeding on insects, worms, small reptiles, etc., largely during night time.

Family *Dromadidae* : Crab Plover

The Crab Plover (*Dromas ardeola*) frequents coastal lagoons and swamps. Its plumage is black and white, its black bill straight and stout. It feeds on molluscs and other estuarine invertebrates.

Family *Laridae* : Gulls, Terns.

This family comprises the gulls and terns, water birds chiefly of soft grey and pure white plumage. Gulls or Kadar-kaagam (கடற்காசம்) have a stout, hooked bill, whereas the bill of a Tern or Uppu-k-kuruvi (உப்புக்குருவி), is slender and pointed. The toes are fully or partially webbed. Gulls occur along the seacoast and at freshwater reservoirs. Most species are migratory. The Brownheaded Gull (*Larus brunnicephalus*) is the common gull haunting fishing harbours and backwaters, feeding on flotsam, fish and other marine matter. The Common Tern (*Sterna hirundo*) is most abundant during late winter (February-March) and feeds, on fish, sometimes hovering in the air before plunging into the water with half closed wings.

Order : COLUMBIFORMES.

Family *Columbidae* : Pigeons, Doves.

In Pigeons and Doves, which are called pura and Mani-p-puraa (புறா, மணிப்புறா) in Tamil, the plumage is soft and dense. The body is plump and the head small. The legs and feet are small, too. The bill is straight and the gape, especially in the fruit-eating species, capable of considerable expansion, to enable them to swallow large morsels of food. The Ring Dove (*Streptopelia decaocto*) and the Little Brown Dove (*S. senegallensis*) affect stony bush and scrub areas in the district.

Order : PSITTACIFORMES.

Family *Psittacidae* : Parrots.

The Parakeet or Kili (கிலி) is best known as a cage bird, sought for its colour and ability to imitate human voices. It has a strongly hooked bill. Its flight is swift. Large flocks of these birds in the

company of other birds were observed feeding on various crops at the Anna Farm, 16 kilometres from Pudukkottai Town. They are a serious pest of cereals and orchard fruit everywhere. The common species is the Roseringed Parakeet (*Psittacula krameri*).

Order : CUCULIFORMES.

Family *Cuculidae* : Cuckoos.

The Cuckoo or Kuyil (கூயில்) has a long, graduated tail. Its bill is small and gently decurved. The nostrils are round and have a raised rim. The Pied Crested Cuckoo (*Clamator jacobinus*) and the Redwinged Crested Cuckoo (*C. coromandus*) are migrants arriving within the district during October on their way to Sri Lanka. Both are called kondai-k-kuyil (கொண்டைக் கூயில்) in Tamil. The Koel (*Eudynamis scolopacea*), is very common, and is trapped and eaten by the local people. The Crowpheasant (*Centropus sinensis*) or Sembottu-p-pul (செம்போத்துப்புள்) and the Greenbilled Malkoha (*Rhopodytes viridirostris*) are resident cuckoos.

The family is best known for its habit of 'brood-parasitism' i.e., laying eggs in the nests of other birds and shirking its own parental duties. Some species like the last two (above) are non-parasitic.

Order : STRIGIFORMES.

Family *Strigidae* : Owls.

The Owl which in Tamil is known variously by the names Aandai (ஆந்தை), Kookai (கூகை) and Nattu (நத்து), is a nocturnal predator feeding on fish, reptiles, birds and rodents. Contrary to popular belief, it cannot see in absolute darkness and can see well in the day time, although it hunts chiefly during the night. It can be active at twilight. Its prey consisting of small animals—insects, rodents, fish, etc.—is usually swallowed whole. Undigested parts like bones and feathers, are regurgitated in the

form of pellets. Due to its eerie calls the Owl is superstitiously associated with misfortune by the village folk. The Horned or Eagle Owl (*Bubo bubo*) and the Brown Fish Owl (*Bubo zeylonensis*) are the two large owls found in the district. The chief difference between the two is that the tarsi (legs) of the former are feathered while those of the latter are bare. Both have a conspicuous pair of elongated horn like feathers above the ears. A pair or so of Eagle Owls can usually be seen among the rock caverns at Sittannaval which is a typical habitat for them. Other Owls found in the district are the Barn Owl (*Tyto alba*) and the small-sized Collared Scops Owl (*Otus bakkamoena*). All owls play an important role in controlling the pests of agriculture, especially rodents.

Order : CAPRIMULGIFORMES.

Family *Caprimulgidae* : Nightjars.

Chiefly nocturnal, the Nightjar (*Caprimulgus asiaticus*) has a plumage which, like the Owl's, is mottled buff and black in colouration and can blend perfectly with the surroundings while the bird squats on the ground. It has white spots on wing and tail, a flat skull, a short and weak bill. It habitually squats motionless along tracks and other open areas, rising abruptly almost under the feet of unwary pedestrians. It feeds chiefly on insects which are hawked in the air with the aid of the enormous gape. The Nightjar is called Padukai-k-kuruvi (படுகைக் குருவி) in Tamil.

Order : APODIFORMES.

Family *Apodidae* : Swifts.

A slim narrow-winged bird, the Swift or Uzhavaara-k-kuruvi (உழவாரக் குருவி) is specialised for a life in the air. It spends most of the day on the wing hawking insects. The House Swift (*Apus affinis*) is common, inhabiting old forts and temples. The Palm Swift (*Cypsiurus parvus*) nests on the leaves of the Palm *Borassus flabellifer*.

Order : CORACIIFORMES.

Family *Alcedinidae* : Kingfishers.

Brilliant hues of blue with chocolate coloured head and underparts, relieved by a white "shirt front", mark the plumage of the Whitebreasted Kingfisher (*Halcyon smyrnensis*). It is known in Tamil as Meen-kuththi (மீன்குத்தி) and also as Vichchuli (விச்சுளி). Its food is mainly fish, crabs, beetles and frogs. The district also has the Pied Kingfisher (*Ceryle rudis*). It is adept in hovering in the air over still water, bill pointing below, and plunging headlong with closed wings to secure its prey.

Family *Meropidae* : Bee-eaters.

Bee-eaters or Kattalaankuruvi (கட்டலான் குருவி) are slenderly built birds predominantly green in colour with a gently decurved bill. They have very short legs and pointed wings. Their food is insects caught on the wing. The Little Green Bee-eater (*Merops orientalis*) is a common resident. The Blue-tailed Bee-eater (*M. philippinus*) arrives in the district during winter.

Family *Coraciidae* : Rollers.

The Roller (*Coracias benghalensis*) or Panankaadai (பனங்காடை) has a plumage of dark and light blue with a pale patch on the wings. It has a large head and stout bill with the upper mandible slightly hooked. Characteristic rolling aerobatics during the display flights explain its name. The bird is frequently seen perched on telegraph wires.

Family *Upupidae* : Hoopoes.

The Hoopoe (*Upupa epops*) or Kondalaaththi (கொண்டலாத்தி) is easily recognised by its boldly black-and-white banded ochraceous plumage and folding fan-like crest. It has a slender and long bill which is adapted for probing the soil for worms, grubs, etc. The bird nests in tree holes, and sometimes under caves and in cracks in the roofs of houses.

Order : PICIFORMES.

Family *Capitonidae* : Barbets.

Barbets are stockily built fruit-eating birds with a stout, conical bill. The Coppersmith or the Crimson-breasted Barbet (*Megalaima haemacephala*)—Kukkuruvaan (குக்குறுவான்)—is a dull green with patches of brilliant red, black and yellow. It is common in gardens and fruit orchards, and is easily recognized from its ventriloquistic call like a distant coppersmith hammering on his metal.

Family *Picidae* : Woodpeckers.

Woodpeckers, Marangothi-p-pul (மரங்கொத்திப்புள்) in Tamil, are highly adapted for living on tree trunks. They have short legs and strong claws. The bill is straight, hard and chisel like. The tongue is long, worm-like and extensile. It has a stiff barb at the tip which enables the bird to probe holes in rotten wood to extract grubs, borers, beetles, ants, etc. The Goldenbacked Woodpecker (*Dinopium benghalense*) is the common Woodpecker in the district. Contrary to general prejudice, the Woodpecker is highly beneficial to forestry by keeping a check on destructive insects of timber.

Order : PASSERIFORMES (PERCHING BIRDS OR SONG BIRDS).

Family *Pittidae* : Pittas.

A ground-feeding bird of the size of a Myna, the plumage of the Pitta (*Pitta brachyura*) has brilliant shades of green, blue, black, crimson and fulvous. A white wing-patch is conspicuous in flight. The bird arrives in large numbers in and around the district soon after the south-west monsoon. It is easily caught in crude noose traps placed on the ground to which it is lured by an imitation of its low whistling call note, and is largely eaten by some local people.

GENERAL

Family *Alaudidae* : Larks.

Larks or **Vaanambaadi** (வானம்பாடி) in Tamil are birds of the size of a Sparrow, inhabiting open grasslands and scrub country. Large flocks are often seen feeding in harvested fields and fallow land. The plumage is dull fulvous, brown or grey with dark streaks on the back in the case of the Redwinged Bush Lark (*Mirafra erythroptera*). It is plain sandy brown in the Finch Lark (*Eremopterix grisea*), the male of which is black below and has whitish crown and cheeks. The bill in larks is short, stout and conical.

Family *Hirundinidae* : Swallows.

Swallows—**Tharai-ilaa-k-kuruvi** (தரையிலாக் குருவி) and **Thagaivilaan-kuruvi** (தகைவிலாங் குருவி) in Tamil are small sparrow-sized birds with streamlined wings and a forked tail, small bill and wide gape adapted for aerial feeding. The migratory Western Swallow (*Hirundo rustica*) is common in winter. The kindred Dusky Crag Martin (*Hirundo concolor*) is a common resident species, frequenting old forts and rock temples, etc. Large flocks of the migrant species can be seen perched along telegraph wires.

Family *Laniidae* : Shrikes.

Shrikes or **Keechaankuruvi** (கீச்சாங்குருவி) are characterised by a strongly notched hooked bill and usually a blackish band through the eye. They like perching on a commanding bush top. They are veritable bullies often pirating morsels of food industriously gathered by other birds. Shrikes are also known as Butcher Birds from their habit of impaling insects, lizards, frogs, etc., on thorny branches, to be eaten at leisure. The Brown Shrike (*Lanius cristatus*) in winter and the Bay-backed Shrike (*L. vittatus*) all the year round are distributed throughout the district affecting thorny scrub jungle.

Family *Ortolidae* : Orioles.

The **Golden Oriole** (*Ortolus oriolus*),—**Maampazha-k-kuruvi** (மாம்பழக்குருவி)—a splendidly coloured bird with yellow and black plumage and a reddish pink beak, is a frequent visitor to gardens and orchards in winter. Its food is, mainly, fruit and insects.

Family *Dicruridae* : Drongos.

Glossy black plumage and a long deeply forked tail, characterise the Black Drongo or King Crow (*Dicrurus adsimilis*)—Vaalnēenda-karunguruvi (வால்நீண்ட கருங்குருவி) in Tamil also Valiyan (வலியன்). It is commonly seen perched on telegraph wires. Its bill is strong, slightly hooked at the tip. It is a noisy, pugnacious bird, often seen attacking other bigger birds fearlessly, or mimicking their calls. It associates with grazing cattle, swooping on the insects in their wake. The age-old Tamil augury goes somewhat like this—“வால்நீண்ட கருங்குருவி வலமிருந்து இடம் சென்றால் கால்நடையாய்ச் சென்றவரும் கனகதண்டி ஏறுவரே” (Should the king crow cross from the right to the left even those who set out on foot ascend a golden palanquin” is a literal rendering—the omen being considered so auspicious.)

Family *Artamidae* : Swallow-Shrikes.

The Swallow-shrike (*Artamus fuscus*) is a squat bird somewhat larger than a Sparrow, of grey and white plumage. Its bill is short, conical and pale blue. Seen mostly in flocks or huddled together on telegraph wires, it feeds in the air, sailing around in the manner of swallows.

Family *Sturnidae* † Mynas.

The Myna family is represented by the Indian Myna (*Acridotheres tristis*)—Myna-k-kuruvi (மைனாக் குருவி) or Naaganavaai (நாகணவாய்) in Tamil—one of the commonest and most familiar birds. The other species met with are the Greyheaded Myna (*Sturnus malabaricus*) and the Brahminy Myna (*S. pagodarum*) called பாப்பாத்திமைனா in South India. (பார்ப்பன பாப்பாத்தி is used in bird-names to indicate a lighter plumage—a fairer complexion). Both the latter species are given to local seasonal migration and arrive in the district in flocks soon after the south-west monsoon.

Family *Corvidae* : Crows.

The Crow is commonly called Kaakkai (காக்கை) in Tamil, although it also has another name : Kaagam (காகம்). Both the common species are present. The Jungle Crow (*Corvus macro-rhynchos*) differs from the House Crow (*C. splendens*) being larger with a glossy black plumage and stouter bill. The Tree-pie (*Dendrocitta vagabunda*) or Vaal kaakkai (வால் காக்கை) has a long graduated tail and a stout arched bill. Its body plumage is grey and rufous, its head a sooty grey. Almost all the species in the Crow family are omnivorous.

Family *Campephagidae* : Cuckoo-Shrikes, Minivets.

The Blackheaded Cuckoo-Shrike (*Coracina melanoptera sykesi*)—about bulbul size—is light to dark grey in plumage with black head in the male and barred underparts in the female. It frequents open scrub and secondary forest. Its call is a soft whistle. Another common member of the family which doubtless occurs in the district (but was missed) is the Little Minivet (*Pericrocotus cinnamomeus*), a slender elegant bird, the male chiefly black, grey and orange-crimson, the female with no black on the head, and yellow largely replacing the red.

Family *Irenidae* : Ioras, Leaf Birds.

The Common Iora (*Aegithina tiphia*) is of the size of a Sparrow. It is predominantly yellow and black and is frequently seen in the district in gardens and roadside trees. It has a number of sweet sibilant whistling calls.

Family *Pycnonotidae* : Bulbuls.

Three species of Bulbul or Kondai-k-kuruvi (கொண்டைக்குருவி) are recorded in the district. The Whitebrowed bulbul (*Pycnonotus luteolus*) and the Redvented Bulbul (*P. cafer*) inhabit mainly open thorny scrub. The Redwhikered Bulbul (*P. jocosus*) prefers well wooded areas. The occurrence of the latter in this area is quite interesting. The scrub is predominantly thorn with no large fruit bearing trees. Apparently most of the original forests have been

cut down and large tracts have been brought under Eucalyptus plantation. Fruit trees like "Paalaa" (*Manilkara hexandra*) might have been distributed throughout the district once (some still occur in a small but fairly wooded patch of forest at Amman-kurichi). This species of Bulbul has a patchy distribution in the east coast, the nearest occurrence being at Marakkanam coast about 320 km. north.

Family *Muscicapidae*.

Subfamilies—*Muscicapinae* : Flycatchers.

Timaliinae : Babblers.

Sylvinae : Warblers.

Turdinae : Robins, Chats.

The Babblers (*Timaliinae*) or Thavittu-k-kuruvi (தவிட்டுக்குருவி) in Tamil, have characteristic short, rounded wings. Their flight is weak, legs and feet strong. They move restlessly among the undergrowth searching for berries, insects, etc., on the ground, keeping in flocks, usually of 6 to 9 birds (hence 'Seven Sisters' in English) noisily calling each other. The Jungle Babbler (*Turdoides striatus*) and the Whiteheaded Babbler (*T. affinis*) are very common.

The kindred Flycatchers (*Muscicapinae*) or Vaarkondai-k-kuruvi (வார்க்கொண்டைக்குருவி) have a typical flat, broad bill surrounded by stiff bristles. Their food is chiefly insects, captured in the air by agile sorties. The Warblers (*Sylviinae*) of the same family, are tiny active birds of predominantly green, grey or brown rather nondescript plumage. Many species closely resemble each other and are not easy to identify in the field. The related Robins and Chats (*Turdinae*) have a plumage ranging from brown, grey and russet to green, and in the Magpie Robin (*Copsychus saularis*) it is black and white. They have longer legs than flycatchers and feed largely on the ground.

Family *Motacillidae* : Wagtails, Pipits.

Wagtails or Vaalaatti-k-kuruvi (வாலாட்டிக்குருவி) and pipits have longish tails which are constantly wagged up and down. Their plumage is grey, yellow or pied. The birds are generally

seen running about and feeding on damp ground around marshes and jheels. The resident Large Pied Wagtail (*Motacilla maderaspatensis*) is found at streams and reservoirs. The Indian Pipit (*Anthus novaezeelandiae*), very like a Lark in colouration and a wagtail in shape, occurs singly or in pairs in fallow fields.

Family *Dicaeidae* : Flowerpeckers.

The sole representative of this family in the district is Tickell's Flowerpecker (*Dicaeum erythrorhynchos*), one of the smallest Indian birds weighing scarcely 6 gms. Its colour is dull olive green. It has a small, pointed, slightly curved, pink bill, and feeds largely on the berries of the plant parasites *Loranthus* spp. and *Viscum* spp. being chiefly responsible for the dispersal of their sticky seeds from tree to tree. It is a common species and bears the Tamil name Poonkoththi (பூங்கொத்தி).

Family *Nectariniidae* : Sunbirds.

The Purple Sunbird (*Nectarinia asiatica*) and the Purplerumped Sunbird (*N. zeylonica*)—Thenkudi (தேன்குடி) are very common. The former is a brilliant metallic blue-black, the latter a glistening maroon or bronze colour with yellow underparts (males). Females are a dull olive-brown and yellow. Their diet consists largely of flower nectar, for obtaining which their slender curved bill and tubular tongue are admirably adapted.

Family *Ploceidae* : Sparrows, Weaver Birds.

Subfamily—Passerinae.

The House Sparrow (*Passer domesticus*)—Oor-k-kuruvi (ஊர்க்குருவி) in Tamil is a well-known commensal of man and found in all habitations. The Yellow-throated Sparrow (*Petronia xanthocollis*) affects dry deciduous forest and scrub.

Subfamily—*Ploceinae*.

The Baya or Common Weaver Bird (*Ploceus philippinus*), known in Tamil as Thookkanaankuruvi (தூக்காணங்குருவி) weaves characteristic retort-shaped nests with tubular entrances, usually located in large colonies on Babul (*Acacia spp.*) Kandi (*Prosopis spp.*), or Palm trees. The male attains a yellow breast and crown in the breeding season, and is polygamous.

Munias or Nelli-k-kuruvi (நெல்லுக்குருவி) are smaller weaver birds with a typical thick, conical sparrow-like bill. They mostly keep in flocks, feeding on agricultural crops to which they cause considerable damage. Three species of Munia were observed at the Anna Agricultural Farm near Pudukkottai : The Black-headed (*Lonchura malacca*), the Whitethroated (*L. malabarica*) and the Spotted (*L. punctulata*).

Given below is a comprehensive list of resident and migratory birds that occur in Pudukkottai district. (The letter M indicates that the bird in question is migratory. The asterisk denotes that the bird in question was actually seen during the survey. Some likely species have undoubtedly escaped notice, while others may turn up as visitors or vagrants from neighbouring areas at one time or another. For fuller accounts of the birds listed the following books may be consulted : Salim Ali (1972) *The Book of Indian Birds*, 9th edition, Bombay Natural History Society ; Salim Ali and S. Dillon Ripley (1968—1974)— *Handbook of the Birds of India and Pakistan*, 10 volumes, Oxford University Press).

Order : PODICIPITIFORMES.

Family : Podicipitidae.

Podiceps ruficollis.—*Little Grebe or Dabchick.

Order : PELECANIFORMES.

Family : Pelecanidae.

Pelecanus philippensis.—*Grey or Spotted billed Pelican.

Family : Phalacrocoracidae.—

Phalacrocorax carbo.—Large Cormorant.

fuscicollis.—Indian Shag.

niger.—Little Cormorant.

Anhinga rufa.—Darter or Snake Bird.

Order : CICONIIFORMES.

Family : Ardeidae.

- Ardea cinerea*.—*Grey Heron.
alba.—Large Egret.
Butorides striatus.—*Little Green Heron.
Ardeola grayii.—*Pond Heron or Paddy Bird.
Bubulcus ibis.—*Cattle Egret.
Egretta intermedia.—*Smaller or Median Egret.
garzetta.—*Little Egret.
gularis.—*Indian Reef Heron.
Nycticorax nycticorax.—Night Heron.

Family : Ciconidae.

- Mycteria eucocephala*.—*Painted Stork.
Anastomus oscitans.—Openbilled Stork.

Family : Threskiornithidae.

- Threskiornis aethiopica melanoccephala*.—White Ibis
Pseudibis papillosa.—Black Ibis.
Platalea leucoroda.—Spoonbill.

Order : ANSERIFORMES.

Family : Anatidae.

- Dendrocygna javanica*.—Lesser Whistling Teal.
Anas acuta.—M *Pintail.
crecca.—M Common Teal.
querquedula.—M Garganey.
clypeata.—M Shoveller.
Nettapus coromandelianus.—Cotton Teal.

Order : FALCONIFORMES.

Family : Accipitridae.

- Elaanus caeruleus*.—M Blackwinged Kite.
Milvus migrans.—*Parish Kite.
Haliastur indus.—*Brahminy Kite.
Accipiter badius.—*Shikra.
Buteo teesa.—White-eyed Buzzard-Eagle.
Hieraaetus fasciatus.—*Bonelli's Hawk-Eagle.
H. pennatus.—*Booted Hawk-Eagle.
Haliaeetus leucogaster.—*Whitebellied Sea Eagle.
Sarcogyps calvus.—*Black or King Vulture.
Gyps indicus.—Longbilled Vulture.
bengalensis.—*Indian Whitebacked Vulture.
Neophron pernopterus.—*Egyptian or Scavenger Vulture.

Circus macrurus.—M * Pale Harrier.

pygargus.—M Montagu's Harrier.

melanoleucos.—M Pied Harrier.

aeruginosus.—M * Marsh Harrier.

Spilornis cheela.—Crested Serpent Eagle.

Family : Falconidae.

Falco blarrnicus lugger.—Lagger Falcon.

Falco tinnunculus.—Kestrel.

Order : GALLIFORMES.

Family : Phasianidae.

Francolinus pondicerianus.—* Grey Partridge.

Pardicula asiatica.—* Jungle Bush Quail.

Gallopertix spadicea.—* Red Spurfowl.

Gallus sonneratii.—* Grey Junglefowl.

Pavo ertstatus.—* Indian Peafowl.

Order : GRUIFORMES.

Family : Rallidae.

Amaurornis phoenicurus.—* Whitebreasted Waterhen.

Gallinula chloropus.—Indian Moorhen.

Fulica atra.—* Coot.

Order : CHARADRIIFORMES.

Family : Jacanidae.

Hydrophasianus chirurgus.—* Pheasant-tailed Jacana.

Metopidius indicus.—Bronzewinged Jacana.

Family : Charadriidae.

Subfamily : Charadriinae.

Vanellus indicus.—* Redwattled Lapwing.

malabaricus.—* Yellow-wattled Lapwing.

Pluvialis squatarola.—M * Grey Plover.

dominica.—M * Eastern Golden Plover.

Charadrius leschenaultii.—M * Large Sand Plover.

dubius.—M * Little Ringed Plover.

alexandrinus.—M * Kentish Plover.

wongolus.—M * Lesser Sand Plover.

Subfamily : Scolopacinae.

- Numenius phaeopus*.—M Whimbrel.
 -arquata.—M Curlew.
Limosa limosa.—M Black-tailed Godwit.
 lapponica.—M Bartailed Godwit.
Tringa erythropus.—M Spotted Redshank.
 totanus.—M Common Redshank.
 stagnatilis.—M Marsh Sandpiper.
 nebularia.—M * Greenshank.
 ochropus.—M Green Sandpiper.
 glareola.—M * Spotted or Wood Sandpiper.
 terek.—M Terek Sandpiper.
 hypoleucos.—M Common Sandpiper.
Arenaria interpres.—M Turnstone.
Calidris minut.—M * Little Stint.
 temminckii.—M Temminck's Stint.
 alpina.—M Dunlin.
 testaceus.—M Curlew-Sandpiper.
Limicola falcinellus.—M Broadbilled Sand. Piper

Family : Recurvirostridae.

- Himantopus himantopus*.—Blackwinged Stilt.
Recurvirostra avosetta.—Avocet.

Family : Burhinidae.

- Burhinus oedipnemus*.—* Stone Curlew.

Family : Dromadidae.

- Dromas ardeola*.—Crab Plover.

Family : Laridae.—

- Larus brunnicephalus*.—M * Brownheaded Gull.
Chlidonias hybrida.—M * Whiskered Tern.
Gelochelidon nilotica.—M Gullbilled Tern.
Hydroprogne caspia.—Caspian Tern.
Sterna hirundo.—M Common Tern.
 albifrons.—Ternlet.
 bergii.—Large Crested Tern.
 bengalensis.—Lesser Crested Tern.

Order : COLUMBIFORMES.

Family : Columbidae.

- Columba livia*.—* Blue Rock Pigeon.
Streptopella decaocto.—* Ring Dove.
 chinensis.—* Spotted Dove.
 senegallensis.—* Little Brown Dove.

Order : PSITTACIFORMES.

Family : Psittacidae.

Psittacula krameri.—* Roseringed Parakeet.

Order : CUCULIFORMES.

Family : Cuculidae.

Clamator jacobinus.—M * Pied Crested Cuckoo.

coromandus.—M Redwinged Crested Cuckoo.

Cuculus varius.—* Common Hawk-Cuckoo or Brainfever Bird.

micropterus.—* Indian Cuckoo.

Cacomantis merulinus.—Plaintive Cuckoo.

Kudynamys scolopacea.—* Koel.

Rhopodytes viridirostris.—* Small Greenbilled Malkoha.

Centropus sinensis.—* Crow-pheasant.

Order : STRIGIFORMES.

Subfamily : Tytoninae.

Tyto alba.—Barn Owl.

Subfamily : Striginae.

Bubo bubo. * Great Horned or Eagle Owl.

B. zeylonensis. * Brown Fish Owl.

Otus bakkamoena. * Collared Scops Owl.

Athene brama. * Spotted Owlet.

Order : CAPRIMULGIFORMES.

Family : Caprimulgidae.

Caprimulgus astaticus.—* Little Nightjar.

affinis.—Franklin's or Allied Nightjar.

Order : APODIFORMES

Family : Apodidae.

Apus affinis.—* House Swift.

Cypselurus parvus.—* Palm Swift.

Order : CORACIIFORMES.

Family : Alcedinidae.

Ceryle rudis.—* Lesser Pied Kingfisher.

Alcedo albis.—* Common Kingfisher.

Halcyon smyrnensis.—* Whitebreasted Kingfisher.

Family : Meropidae.*Merops orientalis*.—* Green Bee-eater.*philippinus*.—Bluetailed Bee-eater.**Family : Coraciidae.***Coracias benghalensis*.—* Blue Jay or Indian Roller.**Family : Upupidae.***Upupa epops*.—* Hoopoe.**Order : PICIFORMES.****Family : Caprimonidae.***Megalafma haemacephala*.—* Crimsonbreasted Barbet or Copper-smith.**Family : Picidae.***Dinopium benghalense*.—* Goldenbacked Wood-pecker.**Order : PASSERIFORMES.****Family : Pittidae.***Pitta brachyura*.—* Indian Pitta.**Family : Alaudidae.***Mirafra assamica*.—* Bush Lark.*erythroptera*.—Redwinged Bush Lark.*Eremopterix grisea*.—* Ashycrowned Finch-Lark.*Alauda gulgula*.—* Small Skylark.**Family : Hirundinidae.***Hirundo concolor*.—* Dusky Crag Martin.*rustica*.—* Common Swallow.**Family : Laniidae.***Lanius vittatus*.—* Baybacked Shrike.*eristatus*.—* Brown Shrike.**Family : Oriolidae.***Oriolus oriolus*.—* Golden Oriole.**Family : Dicruridae.***Dicrurus adsimilis*.—* Black Drongo.*leucophaeus*.—* Grey Drongo.

Family : Artamidae.

Artamus fuscus.—Ashy Swallow-Shrike.

Family : Sturnidae.

Sturnus malabaricus.—* Greyheaded Myna.

pagodarum.—* Brahminy Myna.

roseus.—Rosy Starling or Rosy Pastor.

Aridotheres tristis.—Indian Myna.

Family : Corvidae.

Dendrocyta vagabunda.—* Tree Pie.

Corvus splendens.—* House Crow.

macrorhynchos.—* Jungle Crow.

Family : Campephagidae.

Tephrodornis pondicerianus.—* Wood Shrike.

Coracina melanoptera.—* Blackheaded Cuckoo-Shrike.

Family : Irenidae.

Aegialina tiphia.—* Iora.

Family : Pycnonotidae.

Pycnonotus jocosus.—* Redwhiskered Bulbul.

cafer.—* Redvented Bulbul.

luteolus.—* Whitebrowed Bulbul.

Family : Muscicapidae.**Subfamily : Timaliinae.**

Dumetia hyperythra.—* Rufousbellied Babbler.

Chrysomma sinensis.—* Yellow-eyed Babbler.

Pardalides caudatus.—* Common Babbler.

striatus.—* Jungle Babbler.

affinis.—* Whiteheaded Babbler.

Subfamily : Muscicapinae.—

Muscicapa latirostris.—M* Brown Flycatcher

rubeculoides.—M * Bluethroated Flycatcher.

Terpsiphone paradisi.—* Paradise Flycatcher.

Subfamily : Sylviinae.

- Prinia hodgsoni*.—* Ashy-grey Wren-Warbler.
socialis.—* Ashy Wren-Warbler.
Orthotomus sutorious.—* Tailor Bird.
Phragmaticola aedon.—Thickbilled Warbler.
Acrocephalus dumetorum.—M *Blyth's Reed Warbler.
agricola.—M Paddyfield Warbler.
Sylvia curruca.—M Lesser Whitethroat.
Phylloscopus affinis.—M. * Tickell's Leaf Warbler.

Subfamily : Turdinae.

- Erithacus brunneus*.—* Indian Blue Chat.
Copsychus saularis.—* Magpie-Robin.
Saxicola caprata.—* Pied Bush Chat.
Saxicoloides fulicata.—* Indian Robin.

Family : Motacillidae.

- Anthus novaeseelandiae*.—Paddyfield Pipit.
Motacilla maderaspatensis.—* Large Pied Wagtail

Family : Dicaeidae.

- Dicaeum erythrohyncho*.—* Tickell's Flowerpecker.

Family : Nectariniidae.

- Nectarinia zeylonica*.—* Purplerumped Sunbird.
asiatica.—* Purple Sunbird.

Family : Ploceidae.

Subfamily : Passerinae.

- Passer domesticus*.—* House Sparrow.
Petronia xanthocollis.—* Yellowthroated Sparrow.

Subfamily : Ploceinae.

- Ploceus philippinus*.—* Indian Baya or Weaver Bird.

Subfamily : Estrildinae.

- Lonchura malabarica*.—* Whitethroated Munia
malacca.—* Blackheaded Munia.
punctulata.—* Spotted Munia.

Mammals. Of primates, or the monkeys belonging to the sub-order Cercopitheidae the district possesses one genus, the Bonnet Monkey (*Macaca radiata*) or the familiar 'red monkey', known in Tamil as the Kurangu (கூரங்கு) or Sengurangu (செங்கூரங்கு). The other kind of long-tailed monkey called the Common Langur (*Presbytis entellus*) or Manthi (மந்தி) and Venn-manthi (வெண்மந்தி) in Tamil is also not uncommon. This has a flat black face and black hands and feet.

Of the sub-order Lemnroidae, the district has the Slender Loris (*L. tardigradus*) or Thevangu (தேவாங்கு). This animal is peculiar to South India and Sri Lanka. This little primate is chiefly arboreal and nocturnal. It is very slow in movement, feeding on leaves and fruits of trees, insects, bird-eggs and small birds.

In the order of Carnivora, the first family of mammals is the Felidae or cats. The larger cats such as tigers and leopards are not found in the district. Nor, of course, are lions. The family is represented by other species, the largest being the Jungle Cat (*Felis chaus*) called Kaattu-p-poonai (காட்டுப்பூனை) in Tamil and, until recently, the other wild cat, the Rusty Spotted Wild Cat (*F. rubiginosa*). The commonest member of the family, however, is the Domestic Cat (*F. domestica*) of our towns and villages.

From the sub-orders Viverrinae and Herpestinae, the former are represented by the Small Indian Civet (*Viverricula Indica*) called Punagu-p-poonai (புனகுப்பூனை) in Tamil. It tames easy, was often kept as a pet in the old days, and was caged for its sub-caudal secretion, 'civet'. These are somewhat arboreal animals, living partly on other small animals and partly on fruit and roots. Another genus of this group, the Palm Civet or Toddy-Cat (*Paradoxurus hermaphroditus*) called Mara-naai (மரநாய்) in Tamil is also found in the district's woods although, owing to its nocturnal habits, is rarely seen or reported. The Palm Civet has a long tail is grey and black or brown in colour and lives on small animals birds, lizards, insects and also on fruit and vegetables. This more an urban animal than the common Civet, often spending the day above the ceiling in old buildings.



Indian Pale Hedgehog

Photo : M. Krishnan



Photo : M. Krishnan

The family Herpestidae includes one genus which is found here : the Common Mongoose (*Herpestes edwardsi*) called Keeri or Keeri-p-pillai (கேரி, கேரிப்பிள்ளை) in Tamil and renowned as the deadly enemy of snakes and destroyer of rodents.

The family Hyacnidae, includes the Striped Hyæna (*Hyaena hyaena*) or Kazhuthai-p-puli (கழுதைப்புலி) which is said to have been seen in the Pudukkottai forests at times but is now very rare if not actually extinct.

The family Canidae, or dogs and their allies are not represented by the bigger species such as the wolf. The wild representatives of the Canidae are the Indian Jackal (*Canis aureus*) called Nari (நரி) in Tamil. They were once very common as scavengers in towns and villages near forests or jungles feeding on carrion and offal of all kinds but also occasionally killing small animals such as poultry. The other representative of the group is the Indian Fox (*Vulpes bengalensis*) known as the Kulla-nari (குள்ளநரி) in Tamil. A small greyish animal with a black tip to its tail, this mammal is still common in the forests of the district. The common pariah-dogs are different breeds of *Canis familiaris*.

Among Insectivora, the family Erinaceidae includes the once well-known genus, the South Indian Hedgehog (*Paraechinu micropus*), or Mull-eli (முள்ளெலி). These animals are of the size of a big rat with white or yellow spines all over the body and when disturbed, roll into spiny balls. The other family Soricidae includes the shrews (musk rats) or Moonjooru (மூஞ்சூறு), common in houses and in the open near jungles. They are useful as insectivores. The Grey Musk-Shrew (*Suncus murinus*) is common.

The order Chiroptera includes the bats of which there are many genera large and small to be found in the district. The family Pteropodidae, the fruit-eaters or flying foxes includes the largest of the bats, all of them arboreal. Two genera, the Flying Fox or Fruit-eating Bat (*Pteropus giganteus*) called the Pazhanzhinni-vavval (பழந்தின்னி வெளவால்) and the Short-nosed Fruit Bat (*Cynopterus sphinx*) are common. The family Rhinolophidae is represented by the Schneider's Leafnosed Bat (*Hipposiderus speoris*) ; the family Megadermatidae by the Indian Vampire Bat (*Megaderma Lyra*) ; and the family Emballonuridae, the Black-bearded Sheath-tailed Bat (*Taphozous melanopogon*).

The animals belonging to the order Rodentia are the squirrels, hares, porcupines and rats. Almost all of these are common ; they fall under four families. The Sciuridae include the common squirrels, the Palm squirrel (*Funambulus palmarum*) or Anil (அணில்) with longitudinal stripes on its back.

The family Muridae, includes the rats and mice. Among the rats (*Genus Rattus*) the most common variety is the *Rattus rattus*, or common Indian House Rat called Vetteli (வெட்டெலி) in Tamil. The other cosmopolitan rate of worldwide distribution is the Brown Rat (*Rattus norvegicus*) which is not indigenous to India, having its native home in Chinese Mongolia. The other species of rat are Kaatteli (காட்டெலி) which inhabits open places and fields and the Soft-furred Field-Rat (*Milardtia melitana*). The House Mouse (*Mus musculus*) or Sundeli (சுண்டெலி) is, of course, very common. Other genera of rats are the Indian Gerbil or Antelope-rat, (*Tatera indica*) and the Indian Mole-Rat, (*Bandicota bengalensis*) known in Tamil as the Urumeli (உருமெலி) a more robust rat, common in rice-fields, gardens and cultivated land. Another species of rat is the common Bandicoot, *Bandicota indica* known as Peruchchaali (பெருச்சாளி) in Tamil, a very large rat common near houses. The Bush Rat (*Golunda ellioti*) also belongs here. This lives in jungles making its nest in bushes ; its body is covered with stiff hair.

The family Hystericidae includes the porcupines. The common Indian Porcupine (*Hystrix indica*), or Mullam-panri (முள்ளம்பன்றி) in Tamil is now found but rarely.

The order Lagomorpha includes the family Leporidae composed of the hares and rabbits, and is represented here by the common South Indian Hare or Blacknaped Hare (*Lepus nigricollis*), called Muyal (முயல்) or Kuzhi-muyal (குழி முயல்).

The Indian wild or indigenous genera of the order of mammalia called ungulata are very few in this district. The sub-order Proboscidea includes the elephant (*Elephas maximus*) or Yaanal (யானை) and Aanal (ஆனை) which does not occur wild. The other sub-order Ungulata Vera is also not well represented. The Perissodactyla or odd-toed ungulates are likewise represented by the

domesticated horses, and asses (*Equus* spp.) of the family Equidae that are in no way indigenous though common in large numbers under domestication.

The even-toed Artiodactyla include cattle, sheep, goats antelope (Bovidae), deer (Cervidae) and boar (Suidae)¹. There are no local breeds of cattle or buffaloes and no truly wild cattle or buffaloes in the district. The same is true of sheep and goats. Hemingway mentions (*Gazetteer of the Trichinopoly District*, 1907) that the wild cattle then found "originally were village cattle of the ordinary type but are now larger and stronger than the usual plough-bullocks." These wild cattle are almost entirely gone now. (The Pudukkottai bulls used for the *jallikkattu*,² not being 'wild' in the sense of free cannot, strictly speaking, be included in an account of the district's natural fauna).

The common sheep and goats of the district are called in Tamil *Velladu*, *Semmariyadu* and *Kurumbadu*, the last being a breed once reared by the Kurumba tribes.

The Black Buck or true Indian antelope (*Antelope cervicapra*)³ and the Chital or Spotted Deer (*Axis axis*), which belongs to the family cervidae, was once found in numbers in the forests of the district. The Black Buck are now all but extinct. There are still a few Spotted Deer left.

The Suidae comprise the pigs, of which the wild boar *Sus cristatus* is to be found in the forests. The domesticated pig is bred in large numbers by the Koravars.

The order Edentate, including the Pangolins is represented locally by the Indian Pangolin (*Manis crassicaudata*) or Scaly Ant-eater which is covered with large imbricate horny scales, and superficially resembles a reptile rather than a mammal. It lives chiefly on ants, which it takes in by its long sticky filamentous tongue.

1. Antelopes are Thirugu-kombu maangal (திருகு கெம்பு மாண்கள்) in Tamil—a term of recent manufacture. In Tamil as in other Indian Languages there are no terms to distinguish between antelopes and the quite different deer, though there are terms for the two sexes of the blackbuck. The buck is Kalai (கலை) and the doe Pulvaai (புலவாய்). The antelope collectively is Kalai-maan (கலை மாண்). Deer are Maangal (மாண்கள்) and pig, wild boar Kattu-p-panni (கட்டுப்பண்ணி).

² See under 'Festivals' in Chapter III.

CHAPTER II—HISTORY.

In the plant world, bird world and the animal world, there is apparently no movement towards 'progress' from generation to generation. Sparrows have remained sparrows and porcupines but porcupines. But with *Homosapiens* it has been a very different story. He is constantly discovering, advancing, acquiring newer and newer skills, rising on the wings of contrivance and complexity.

K. R. Srinivasa Iyengar in
*Rethinking
on Ends and Means in Education.*

History is the continuous movement of a people in time.

K. M. Panikkar in
The Determining Periods of Indian History.

Circles formed with ancient boulders—dolmens as some of them are described—speak of Pudukkottai having been one of the seats of early man. Inscriptions on stone dating from an era earlier than Christ to recent times tell the story of the progress of human life in this tract.

For several centuries the Pudukkottai area lay as a buffer between major Tamil kingdoms, merging for a while with one and for a while with another. It did not, however, get assimilated in the systems of any of its powerful neighbours. What can be called an escapade with an elephant led, in the seventeenth century, to Pudukkottai graduating from a buffer zone to an independent geo-political unit. An unprivileged community—the Kallar—came now to the fore and made itself count in South India's political history.

Narrations of historical events that are either too rigidly 'periodized' or too 'local' cannot do justice to man's continuous movement towards 'progress', the phenomenon that distinguishes him from other creatures. His searches, which have drawn him over continents and hills and across the oceans,¹ form a continuum that cannot be inhibited thus.

¹ For the relevant paragraph on 'Lemurian Theory' contributed by Dr. K.K. Pillay, please see under 'Rehabilitation' in the Chapter XIII—'Other Departments'.

A cut up view of the history of Pudukkottai as Pudukkottai could, therefore, have but little value. But particular tracts can influence the progress of life in the region. To this extent they admit of a study in detail. The tract on the map of the southern peninsula identified broadly as the Pudukkottai area can, therefore, have a microscope placed over it, with advantage.

Pudukkottai's history has no separate origin or continuity from that of the region south of the Vindhyas. The social, cultural and political phases of the Pudukkottai tract partake of the general process that has been described as an assimilation of the Aryan pattern with Dravidian culture.

Archaeology has provided tangible evidence about Pudukkottai's early history. K. R. Srinivasan writes: "A waste flake of cherty flint, evidently struck off while making an artefact, was collected by Sir A. Tottenham on the bund of the Avikkanmoi in Rangiam village close to Kuruvikkondanpatti (Tirumayam taluk). V. D. Krishnaswamy, the noted prehistorian of the Archaeological Survey of India, describes it as of the early palaeolithic type prepared by the clacton technique with a flaking angle of 120°, a common feature of early palaeolithic flakes. The main or primary surface shows a raw-sienna patination on this surface shows freckled-white over raw sienna indicating clearly that is an older surface. The broken margins show the arenaceous character of the flint. It is a very interesting find since such flint artefacts are rare in this part of South India." In the words of K. V. Soundara Rajan, Director, Archaeological Survey of India, 'stone tools of both medium-sized as well as truly microlithic varieties are occasionally collected from the laterites of the eastern part of the district.

But the laterites here being of a primary variety the tools 'derived' on them cannot be held to bear directly or coevally with the laterites in age. The finds do, however, show that in the late Stone Age¹, the lateritic tracts of this district harboured human life, though the man of the times was in the savage and barbaric stages; and his life was fitful and unplanned. The ecology of the period nurtured only game and birds, which provided subsistence to man. This goes to substantiate the view² that the early inhabitants of the area were hunters and

1. In a note for the *Pudukkottai District Gazetteer*.

2. Approximately between 2,00,000 and 10,000 years back.

3. See Kanakasabai Pillai's *Tamils Eighteen Hundred Years Ago* (1904) and S. Radhakrishna Aiyar's *A General History of the Pudukkottai State* (1916).

their population was very sparse. Such rather rare finds contrast with the profusion of tools of early stone age discovered in the laterites of the Chengalpattu district around Madras, where along with the finished tools, various others in different stages of manufacture indicating them as regular factory sites and other similar areas of Tamil Nadu in particular and South India in general.

The Salem area on Pudukkottai's north-west and the Madurai area on its immediate southern side have thrown up unsystematized varieties of neolithic¹ archaeological material such as polished stone axes and pottery, indicating the practice of subsistence farming or shifting cultivation. The Pudukkottai area itself, however, has not yielded any definite coeval data showing such primitive agricultural activities. K. Venkatarangam Raju, however, found in association with an urn burial a few of the neolithic cults, in the twenties of this century now kept in the State Museum. Bringing this instance to our notice, K. R. Srinivasan writes: "In the absence of any scientific record and evidence of its stratigraphical content, one cannot say whether it indicates or proves the presence of the late neolithic or chalcolithic man in the area; or has been associated as a mere cult object or worship in a megalithic context, when they are known to be used as such from the evidence derived in respect of other places in the South."²

Settled agriculture began, apparently, with the arrival of the iron using megalithic folk. Adichanallur, a hamlet in the Tirunelveli district contains urn burials of a pre-historic age. The articles found in them include not only bronze ornaments, beads, pottery, iron tools but, peculiarly enough, gold diadems and mouth pieces. The gold mouth pieces appear to have been connected with the religious ceremony of carrying *Kavadi* to the shrine of Muruga. Among the finds at Adichanallur there were also iron hoes, iron tridents, iron banner bases and representations of fowls in bronze. Some of these unquestionably pertain to the worship of Murugan, the favourite deity of the Tamils over the ages. Similar mouth pieces have been found in Cyprus in tombs of the bronze age. Again, in two sites

¹ Approximately between 2000 and 1000 B. C.

² In a note for the *Pudukkottai District Gazetteer*.

at Palestine certain equipments similar to those at Adichanallur have been discovered. Experts have assigned one of these sites at Gaza to about 2000 B. C., while another at Gerar is held to belong to about 1200 B. C. These do not contain iron. But among the early iron age tombs in Palestine, belonging approximately to the time of Solomon, a three-pronged fork or trident of iron is found which resembles that at Adichanallur. The Adichanallur finds clearly belong to the Iron age and are perhaps later than those of Palestine. This suggests that the Tamils were immigrants from Western Asia.¹ In Pudukkottai area the megalithic period, however, is very well marked in contrast to the adjoining Thanjavur (deltaic) district.

The early writers associated Kurumbars² with the megalithic culture of South India, which dates between 300 B. C. and 100 A. D. though such association has not been scientifically proved by anthropology and ethnology. This culture is taken³ to inaugurate the historical period in South India. In Greek, 'megathos' means 'Huge' and 'lithos' refers to 'stone'. 'Megalithic' denotes the characteristic use of large stones in monumental remains.

The term has come to signify, in particular, stone-capped burial monuments with chambers and similar interment arrangements in stone. They are loosely termed 'dolmens' and are generally found with a circle of stones and small boulders on the surface of the spot. In some cases two concentric circles are seen. These monuments are found in many places in Tamil Nadu. Among them the districts of Chengalpattu, North Arcot, South Arcot, Pudukkottai, Ramanathapuram, Salem, Coimbatore and Tirunelveli districts have significant concentrations. Even within a site, different types have been met with and excavated, suggesting modifications in the character of burials and construction of the monuments.

1. Some, however, think that the Tamils might have gone from South India to Western Asia: See for the divergent views: K. K. Pillay: *A social History of the Tamils*, Vol. I. (Second Edition), pp. 69.

2. *The Oxford History of India* (p. 220 of Third Edition). C. Minakshi, however, observes in her *Administration and Social Life under the Pallavas* (1938)—the book is currently being revised by K. K. Pillay for the University of Madras:—

"There is also no demonstrable connection between the Pallavas and the Kurumbas; the latter continued as a separate tribe, subject to the rule of the Pallavas and later of the Colas and in the reign of Aparajita, we come across a chieftain who bears the surname 'son of the Kurumbas'—Kurumbaradittan. The designation of Kadavar or Kaduvetti, often applied to them, tells us more of their work in the Tamil land, the spread of civilisation in forest tracts, than of their origin."

3. See Romila Thapar's *A History of India* (1966) p. 26.



PHOTO: Suresh B. Pillai

Megalithic burial near Pudukkottai town.

Regarding the proto-historic (early historic) periods, K. R. Srinivasan says, "There are three most important bodies of evidences of human activity in the area. They are (a) the megalithic monuments, commencing in date from circa 750 B.C. in South India. (Pudukkottai forms an important centre in this respect with the hundreds of megaliths¹ in almost all the ancient sites); (b) The site of Sittannavasal (anciently 'citupocil' according to me, K.V. Subramanya Iyar and others and cirupavil' according to I. Mahadevan) Seminaran Inscription (Edited by K. Nagaswamy 1966) in close association of the megaliths has one of the earliest Tamil-Brahmi inscriptions of the 3rd-2nd century B. C., attesting to the habitation of man, from that date and earlier, as evidenced by the megaliths and their numbers indicating the size of the community inhabiting the area; (c) The parallelism of such burial customs and reference to such monuments in Sangam literature commencing from the period around the commencement of the Christian era and identification of some of the places in the district with those mentioned in the Sangam literature, e.g. Oliyamangalam which had its original name 'Ollaiyur', as found in the old inscriptions, before it was gifted to brahmins and acquired the suffix 'mangalam' to become Oliyamangalam.

Soundara Rajan writes²: "They (megalithic burials) reflected for the first time and in a highly systematic and technically efficient manner, the capacity for quarrying granite rock into reasonably thin slabs of dimensions averaging to as much as 6 feet' by square, if not larger, and organising these into box like 'cist' tombs complete with floor slabs, side orthostats and capstone slab, and highlighted by a porthole opening (of 1½ feet diameter on an average) on the eastern side and shut by a small door slab and provided with a passage all across up to the bounding stone circle which delimits at once the grave and its superincumbent cairn heap. The transepted port-holed cist with ante-chamber is a typical tomb of the Pudukkottai district. The construction of such tombs in large numbers in each of the sites would have a significant bearing

¹. A note on the excavation of megalithic sites in Pudukkottai district carried on by the Archaeologist Survey of India in 1975-76, prepared by Thiru K. S. Ramachandran, Registering Officer of the Archaeological Survey of India, is given as Appendix I—'Excavations of Megalithic Sites in Pudukkottai district.

². In a note for the *Pudukkottai District Gazetteer*.

upon the quantum of output of the quarrying, dressing and designing machinery, and the tools output adequate for it, apart from the demographic bearing it would have had over the mortality-rate in the villages at the time.

A few burial sites have been excavated, revealing pottery and ornaments, some of which are exhibited in the Government Museum at Pudukkottai.

Funeraries of the type described in the Pudukkottai district have been protected by the Archaeological Survey of India in several places like Amburappatti, Ammachatram, Annavasal, Kilaiyur, Melur, Mootampatti, Narangianpatti, Perungalur, Peyal, Poyyamani, Puttambur, Satyamangalam, Sengalur, Sittannavasal, Tayinippatti, Tekkattur, Tiruppur, Vadaguppatti, Vattanakuruchi and Vilappatti. Known in some parts of South India as 'Pandavakuli' or 'Pandava's pits'¹, they are also known as 'mandavarkull' or 'the pits of the dead' and 'Kuranguppattadai' or 'monkey's workshop'. The name by which those funeraries are most widely known in Tamil, however, is 'mudumakkaltazhi' or 'burial pots for old people'. An explanation for this name is that burial in pits was reserved for old or distinguished clansmen, or men of an exalted status deserving the special acknowledgement of the community. Another plausible explanation is given by K. R. Srinivasan. On the basis of a Pandya Inscription of the thirteenth century at Narttamalai, he says that the modern name of 'Kuranguppattadai' is a corruption of 'Kurakkuppadai' or 'Kurakkupattadai' which means a sepulchre or tomb lowered into the earth".

The majority of the urns were bereft of ornament but contained pottery of various forms and even some vessels of bronze. The pots excavated are either red or red rimmed with black.

¹ The legend behind this name, which is an offshoot of the Mahabharatha story, has it that the five Pandavas dug them as refugees from Duryodhana.

² This name derives from the other great epic, the Ramayana, and is based on the belief that the circles were made by the monkey hosts that accompanied Rama to Lanka.

Some of the tomb furnishings include personal ornaments such as bronze bracelets, chank bangles, studs, and beads with holes for a string to pass through. Iron swords, daggers, spear heads and arrow heads with spiked or hollow handles, valaris (Boomerangs), and other weapons also have been found in some of the burial sites, surrounding the urn. In the urns unearthed near Pudukkottai town smaller but even more elegant weapons were found; three small earthenware vessels, one of which held two weapons of polished stone, a stone spearhead with a spiked handle 3 inches in length, and a scraper. The urns have generally been found to contain human bones. Two in the Pulvayal forest area contained seated skeletons, quite complete and holding short swords in their right-hands, while the left arms rested on the thighs. In one of the Pulvayal urns, an 18 inches long sword was found with an embossed decoration near the handle and the strange phenomenon of human teeth adhering to the blade.

James Hornell, writing in the *Memoirs of the Asiatic Society of Bengal* (1913) on the chank bangle industry, states that Tamil classics such as *Maduraikkanchi* furnish evidence of the industry having come to its own in the Pandyan Kingdom in the early centuries of the Christian era. Likewise, the 'valari' or 'valaitadi' was another ingredient of some of these burials. It may be noted here that it is a weapon that the area used with skill in later times. The Sangam¹ works *Purananuru* and the later *Manimekalai* refer to this burial practice. The latter classic speaks of the following prevalent methods of disposing of the bodies of the dead : (i) Burning ; (ii) Casting them away so that they lie exposed (as in the Parsi 'Towers of Silence' ; (iii) Burying them in mud pits ; (iv) Enclosing them in low secure places (the words தாழ்வையின் அடைப்போர் show that kistvaens were intended) ; (v) Placing them in pots (தாழியில் அடைப்போர்).

It is clear from the above that the practice of burial in one or the other megalithic styles, while it may have started before

¹ The Sangam age is generally assigned to the period A. D. 100 to A. D. 200.

the advent of Aryan influences, persisted even thereafter.¹ Cremation, a Vedic rite, is one of the forms of disposing dead bodies, which is mentioned along with the others in *Manimekhalai*.

In the *Early History of the Vellar Basin* (1954) M. Arokiaswami has attempted an enquiry into the beginnings of the Vels who are regarded as the originators of the Vellalars. On the strength of epigraphic² and literary³ evidence, he has suggested that the Vellalars arose as an agricultural class in the Gangetic basin. Other historians have questioned this theory. Arokiaswami has made an attempt to historiograph the various traditions that connect them with the sage Agastya, who according to a popular belief, led an influx of immigrants from the north into the South.

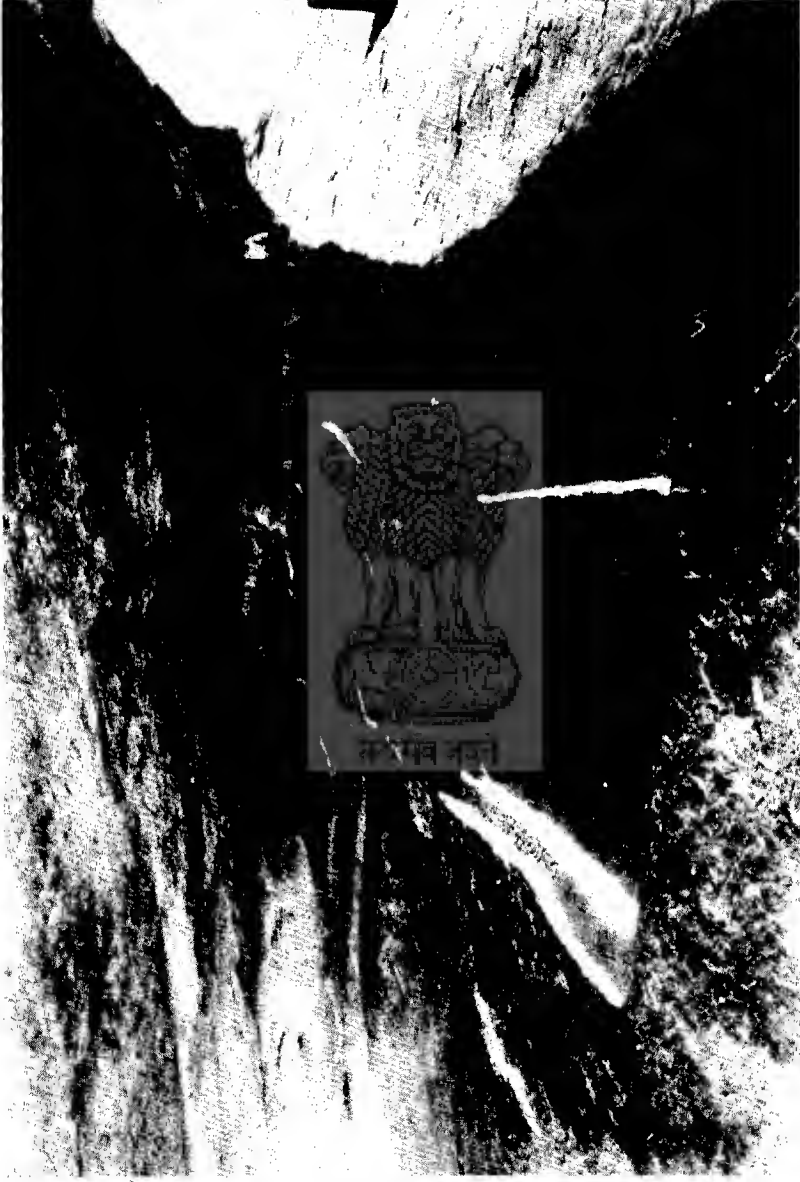
¹ In the words of K. R. Srinivasan, "If we accept the postulate that the literature of a people of a particular period not only portrays contemporary life and events but may also embody in it earlier traditions and that the advanced state of civilization which we find in the Sangam period probably had its origin much earlier, we may place the earlier limits of the megalithic and urn-field culture, which seems to have been a dominant factor of early Tamil civilization, in the pre Sangam epoch i.e. earlier perhaps than the last three centuries B. C. and earlier, too, than effective 'Aryan' contact with South India.

The gradual percolation of 'Aryan' ideas into the Tamil culture is noticeable in the different strata of the Sangam literature, and as we approach the close of the period the influence of these ideas gets more and more marked until the two cultures become thoroughly intermingled; when we hear of the Tamil kings performing and protecting Vedic sacrifices we find cremation according to Vedic rites taking precedence over the more ancient customs of burial. By about the fifth century A. D. comes a dark chapter in Tamil history, synchronizing with the Kalabhra interregnum, and when we see light again in the sixth to seventh centuries A. D. We have a literature totally different from the Sangam works in vocabulary, diction and metre, and predominantly devotional in nature. This taken together with the misconceptions about the burial urn enumerated above from the literature of the eleventh century and after, indicates the later limit of the megalithic and urn-field burial customs in South India as the beginning of the fifth century A. D. or earlier."

The Megalithic Burials and urn-fields of South India in the light of Tamil literature and tradition.

² Among these are the Chola-Grantha and Kannada inscriptions at the Muvarkovil and the Muchukundeśvara temple respectively, in Kodumbalur.

³ These include the *Tolkapṣyam*; the Sangam works of Kapilar; the Ceylon chronicles *Mahāvamsa* and *Deepavamsa*; Taylor's *Oriental Manuscripts*; the Mackenzie Collections and the body of literature relating to the 'Aryan invasion of South India.



Jaina cave and 'beds' at the Eladippattam, Sittannavasal.

Courtesy : Archaeological Survey of India

In the Lanka canto of the *Ramayana*, Rama exclaims, "I killed Ravana and have won and recovered thee, O Sita, even as the sage Agastya won and reclaimed the inaccessible southern regions". If the *Ramayana* is to be taken as having been composed in the fifth or sixth century B.C. (as it has been, by scholars such as Dowson and Jacobi) then the Agastya led movements should have, according to Arokiaswami, taken place at least a century earlier. He therefore places the date of the earliest migrations of the Vels into the south in the seventh century B.C.

But the Vellalas, as Nelson has pointed out in the *Madurai Manual* (1868), are a Tamil speaking people, and know no other language. They do not also display any markedly non-Tamil traits of socio-cultural behaviour. It is likely therefore, that they were immigrants to the southern regions of the Tamil country not from the extreme north as Arokiaswami suggests but from some nearer areas such as the regions immediately north of the Tondaimandalam¹.

In course of time, the tract watered by the Vellaru² (approximately co-eval with the present Pudukkottai District) where the Vellalars had concentrated, came to be divided into two geophysical zones. One of these was known as the 'Konadu' or the 'lands of the king' implying their farmed, and, presumably, taxed character. The other came to be known as the 'kanadu' or the wild or jungle land. According to a palm-leaf manuscript³ the 'konadu' tract extended from Uraiyr near Tiruchirappalli to Cholavandan in the Madurai district and included Piranmalai, Ponnamaravathi, Karaiyur, Oliamangalam, Annavasal and Vayalogam. It comprised five-eighths of the land occupied by the Vellalas, the other three-eighths forming the 'kanadu'. The latter tract lay to the south and east of 'konadu' and extended as far south as Tondi and Kalaiyarkovil and included much of the present Alangudi and Pudukkottai taluks and the eastern portions of the Tirumayam taluk from Viracchalai.

¹ It is notable in this connection that the *Tolkappiyam* equates the term 'Vellala' with the 'Sudras' of the Vedic classification.

² See under 'Origins of the District' and 'Rivers' in Chapter I.

³ The manuscript, belonging to Tekkattur Subramanya Velar and was filed as a record in the Pudukkottai Chief Court.

A spiritual Influence from the North.—Rivers quicken agricultural enterprise. Centuries of settled agriculture enable man to explore other pursuits. While the Vellaru basin was seeing Vellala cultivators bringing 'konadu' lands under the plough, a region hundreds of miles to its north had gone far beyond this preliminary stage—the Gangetic plain. It was witnessing endeavours of a different kind. The developed agricultural and mercantile society around the Ganges was going through a phase of intense spiritual activity. Religious orthodoxy, the socio-cultural product of an agriculturally settled society, had given rise there to two heterodox creeds, those of Mahavira and the Buddha. Mahavira, who at the age of thirty in c. 510 B.C. had become an ascetic, believed that everything in the universe had a soul. The purification of the soul, he held, was the real purpose of life which required the leading of a balanced life. Non-possession and non-violence were stressed by Mahavira as imperative values of such a life. A cadre of wandering ascetics rose in the Gangetic valley to spread the Jaina tenet and it travelled widely. Jaina monks went to western India (a Jaina stronghold to this day), parts of the north, and to the south. The sect was able to influence some ruling chiefs which helped the spread of the creed considerably. An old Jaina tradition has it that Sruta Kevali Bhadrabahu, one of the early monks spreading Mahavira's message, inspired Chandragupta Maurya (c. 322 to 364 B.C.) to embrace Jainism. "There is nothing improbable in it", says K.M. Panikkar in *The Determining Periods of Indian History* (1963). He is supported by literary and epigraphic evidences, as well as local history and place names. Tradition maintains that Chandragupta, accompanied by his preceptor Bhadrabahu, retired to Sravana Belgola in Mysore and spent his last years there practicing prescribed austerities, dying finally of voluntary starvation "in the approved Jaina manner"¹. According to Jacobi², Bhadrabahu died in 297 B.C., but not before sending his disciples farther south to preach Jainism. Sravana Belgola, Madurai and Kanchipuram became their important religious and educational centres. "But the majority of the Jaina monks" says Romila Thapar, "tended to scatter and isolate themselves

1. See Vincent Smith's account in *The Oxford History of India*.

2. Jacobi's observations on the subject in *Sacred Books of the East*, XXII, are quoted by K.R. Venkatarama Ayyar in *South Indian Jainism*, a paper read before the Archaeological Society of South India on 30-4-1957.

in the hills and forests"¹. Pudukkottai is one of the places in the south to which these monks repaired. Jaina monks scouring the region found that in an oval-shaped rock in this tract age and weather had opened out clefts². They let themselves into the widest fissure on this hillock, chiselled bed-like spaces on its floor, to practice austerities and to meditate on the verities taught to them by Mahavira. The terrain with its rugged and close-to-nature character quite obviously seized the monks' imagination as a potential retreat. The natural cleft or cavern is on the eastern face of the hillock and is known as the Eladippattam.³ There are seventeen 'beds' with pillow-like distensions at one end of each bed. They bear inscriptions containing names of monks and others associated with the cavern. One of them has an inscription written in the earliest Indian script, the Asokan-Brahmi.⁴ This epigraph,

¹ *A History of India* (1966), p. 180.

² See under 'Sittannavasal' in Chapter XIX.

³ The famous cave-temple at Sittannavasal is on the rock's western face and was excavated at a much later date.

⁴ It was originally held that the language of the inscription was Pali. K.V. Subramanya Ayyar, however, suggested (*Proceedings and Transactions of the Thiru Oriental Conference, Madras, 1954*) that the language used in this inscription is Tamil and the script Brahmi with variations to adapt it to the genius of the Tamil language.

⁵ The name of this script is explained by Romila Thapar in *A History of India* (1956), p. 72: "Until about a hundred years ago, Ashoka was merely one of the many kings mentioned in the Mauryan dynastic list included in the Puranas. But in 1837, James Prinsep deciphered an inscription written in the earliest known Indian script, Brahmi. The inscription referred to a king called Devanamapiya Piyadassi (the beloved of gods, Piyadassi). The mysterious king Piyadassi remained a puzzle, since the name did not tally with any mentioned in the sources. Some years later the Buddhist chronicles of Ceylon were examined and were found to refer to a great and benevolent Mauryan king as Piyadassi. Slowly the clues were put together and seemed to make sense, but the final confirmation came in 1915 with the discovery of another inscription in which the author calls himself King Ashoka, Piyadassi. It was evident that Piyadassi was a second name used by Ashoka."

The fact that the script is Ashokan-Brahmi, led Fergusson in his *Rock-cut Temples of India* to observe:

"It is not unreasonable to suppose that Ashoka's Buddhist missionaries in Ceylon passed through the Tamil country and even attempted to propagate the Buddhist creed there in spite of the *Mahavamsa*, which says that they flew in the air and arrived in Ceylon. . . The Chinese pilgrim Hiuen Tsiang says 'There are the ruins of many old convents'. . . . The numerous Jain figures and beds together with Brahmi records existing in one and the same cavern again raise the suspicion that these caverns, once occupied by the Buddhists, were in a subsequent period appropriated by the Jaina ascetics, whose religious institutions—particularly those relating to mendicancy—could not have been far different from those of the Buddhists".

But Fergusson's conjecture is not supported by substantive data indicating a Buddhist settlement here prior to that of the Jinas.

which has been assigned by Buhler to the second or third century B.C. constitutes the oldest lithic record in the Pudukkottai district and one of the oldest in South India. It has been read¹ as follows:—

Eomi nattu (Oyma nattu), Kumattur Pirantan Kavudi (Kavidi) Itenukku Citupocil Ilaiyar ceyta adittanam which means : 'Unto Kavidi Iten (Iten bearing the title of Kavidi) a native of Kumattur in Eomi (Oyma) nadu (district), the adittanam made by Ilaiyar of Cittupocil'.

Eominadu was the name of a territorial division corresponding probably to Oyma (or Eruma) nadu, a tract of country about the modern Tindivanam, a division in ancient days of Nadunadu.

Kumattur must have been a village in the above nadu. This name for a village is implied by the name of a poet of the last Sangam who contributed the second ten stanzas of 'Patirruppattu', and was called Kumattur Kannanar (Kannanar a native of Kumattur). Kavudi-Kavidi was an ancient title bestowed by kings on Vellalas (See *Tolkappiyam*—verse 30, *urai*). This is evident from the titles of two ancient poets belonging to Tindivanam (then called Kidangil) who contributed to the *Narrinai*, viz., Kidangil Kavidi Kirankannanar (Kannanar, son of Kiran, a Kavidi and native of Kidangil—Tindivanam) and Kidangil Kavidi Perunkorranar (Perunkorranar, a Kavidi and a native of Kidangil—Tindivanam).

Iten was apparently the name of the person who was a Kavidi and a native of Kumattur in Eominadu. 'Cittupocil' must have been the ancient name of Sittannavasal, which is called in later inscriptions Sittannalvayil—the abode of Arhats and Siddhās. The name Ilaiyar refers to a forest tribe known as Malavar. It

¹ The Pudukkottai Darbar deciphered a total of 1130 inscriptions, translated and published them (inscriptions 1 to 150 in Part I and 150 to 269 in Part II) in two volumes, entitled *Inscriptions in The Pudukkottai State*. The inscriptions, accordingly, bear numbers in a series called P.S.I. standing for Pudukkottai State Inscriptions. P.S.I. Nos. 270 to 1130 have not been translated into English. But they have all been listed in a chronological list published in 1929 by the Darbar, both in Tamil and in English. The above rendering of the Brahmi inscription at Eladippattam P.S.I. No. 1) is from Part I of the *Inscriptions of the Pudukkottai State*.

is from this tribe that Karikalan, the great Chola King, after the conquest of their forest kingdoms, seems to have recruited most of his army. ¹

'Adittanam' means in Sanskrit and Pali, a place or abode. According to K.V.S. Aiyar, 'the use of the word' 'adittanam' is of importance. It may mean a capital city or it may be taken to be a synonym of vasa 'a dwelling place or abode' (basti) ; but as a place of residence it is not generally met with. It seems to indicate the place where one spends one's life in fulfilment of a vow or resolution once taken. Thus a Brahmachari's dwelling in the asrama of his preceptor may be called an 'adhithhana' and it is so used in the anonymous *Svapnanataka* (a Sanskrit work). But this word has a special significance also and it occurs often in Buddhist works. In Pali 'adhittana', means 'the vow of resolution'. Some substitute 'pranidhana' for 'adhittana' of which it is only a synonym. It is clear that in our inscription adhittana must refer to the monastery."

The view commanded from the Eladippattam cavern today is of an extensive open space, but at the time when the first Jaina monks came there it must have been surrounded by wild country. The sages meditating atop this perch must have required considerable hardihood of mind and body.

The Jaina religion does not, however, appear to have made much headway with the generality of people in the tract. Jaina prescriptions were so strict as to admit of observance by monks only. Since farming necessarily meant ownership of landed property and involved violence to insects, and pests, agriculturists were excluded from the Jaina fold². Philosophical speculation could have scarcely interested the Kurumbars and Vellalars. Their pastoral-agrarian form of life, as that of people in the rest of the Tamil country, had place only for "more earthly cults such as the worship of Murugan, the God of war and fertility to whom offerings of rice and blood were made. or the simple worship of 'hero stones' commemorating those who have performed great feats in battle."³

¹ See K.N. Sivaraja Pillai, *Chronology of the Ancient Tamils*, p. 64.

² *A History of India* (1966), p. 65, by Romila Thapar.

³ *A History of India* (1966), pp. 104-105 by Romila Thapar.

Konadu and Kanadu.—While the traditions associated with Chandragupta Maurya testify to the arrival of Jainism in this region when it was still in an early stage of civilisation, the inscriptions of Chandra gupta's grandson, Asokavardhana (c. 273 to 242 B.C.) reveal a more advanced stage in its history. Some of Asoka's edicts refer to the kingdoms of the south as those of the Cholas, Pandyas, Satyaputras and Keralaputras. The lands under the control of these southern kings lay outside the Asokan empire. The konadu tract of the Vellalas at this time was under the sway of the Cholas, whose domains extended from Nellore in the north to the banks of the Vellaru in the south. Kanadu was in the Pandya country, which began where the Chola ended. The Asokan-Brahmi inscription at Eladippattam referred to earlier, in fact, points to the presence of sophisticated territorial divisions such as indicated by the term Eominadu. The term Kavudi or Kavidi used in the inscription has been taken to imply a titled person, probably a chieftain under the sway of the Cholas. The inference that may be derived from these words in the Eladippattam rock-face inscription is that the konadu was a tract with well-demarcated administrative zones and was governed by a politico-administrative hierarchy of considerable weight.

In several records such as copper-plate grants relating to the Vellalars of this region, they are referred to as the *nilattarasu* or 'the rulers of the soil', as opposed to the *mudiarasu* or the 'crowned Kings'. The latter term 'crowned kings' is evidently a reference to the Cholas and Pandyas. This would imply that the Vellalars were the *de facto* lords of the land, subject only in a general sense to the Cholas and Pandyas. The *Tolkappiyam* says that the Vells gave their daughters in marriage to the crowned kings. This as well as the traditions that they enjoyed the right of placing the crown on the heads of the kings¹, indicates that the Vellalars were considered as men of high-rank and were regarded as such by the Cholas and Pandyas as such. The konadu tract was divided into three divisions or *kootrams* (Uraiyur, Oliyur and Urattur). The kanadu portion consisted of two *kootrams*, the *kanakootram* and the *milalaikootram*.

¹ In a petition against the Census of 1871 the Vellalars claimed that the hero of the *Ramayana* was crowned by a Vellala on the banks of the Godavari during his sojourn in that region.

Vellala society around the turn of the last century B.C. appears to have consisted¹ of eighteen castes or sections of people working “expressly for the Karala Vellalas” and being paid by them. These were :—

1. Barbers
2. Potters
3. Washermen
4. Occhans, or scribes and accountants who wrote down what was dictated to them.
5. Blacksmiths
6. Goldsmiths
7. Braziers
8. Carpenters
9. Masons
10. Orrai Sekkan (oil pressers using single bullocks).
11. Irrattai Sekkan (oil pressers using two bullocks).
12. Ilai Vaniyans, or betelleaf growers (Ilai=leaf).
13. Garland-makers (flower-sellers) for temples etc.
14. Tailors.
15. Pallis or Watchmen
16. Valaiyars or Fishermen
17. Shepherds
18. Bards.

The five classes of ‘Kammalars’

Three classes of Vaniyars.

“These workmen seem to have got their means of subsistence in various ways. In some cases, workmen were paid directly for the work that they did, like the smiths and the washermen. These and others like the potters had ears of corn set apart for them in the paddy fields, from which they were to gather the produce. The smiths, the potters and others had also annual assignments of paddy to them, which they received soon after the harvest. The barbers, the potters and the washermen received also (களப்பிச்சை) or paddy that was offered to them as a free gift in the paddy fields soon after the harvest, and (அகத்தன்மை) or cooked rice offered to them in the houses of the Vellalars.”²

1. *A General History of the Pudukkottai State* by S. Radhakrishna Aiyar, pp. 59-60. The author does not, however, mention the source of this information specifically.

2. *A General History of Pudukkottai State* (1916) by S. Radhakrishna Aiyar.

By about the second century of the Christian era, the tract must have contained areas showing vastly different levels of human aspiration and endeavour. Vellala farmers bent over the plough and so there must have come into existence farms and 'settled, village communities with all the classes described above.

A Literary Allusion.—This is indicated by the description of the Kodumbalur (Pudukkottai) tract in the great Tamil epic *Silappadikaram*¹, which is taken to relate presumably to the second century A.D.

Kovalan and his wife Kannagi, the main characters of the epic, accompanied by a chance-met elderly female ascetic Kavundhi, are travelling towards Madurai (their destination) on foot from their native Kaveri-p-poom-pattinam. They cross the Kaveri in a boat and reach Uraiyur. Proceeding further, they meet a Brahmin wayfarer and Kovalan asks of him the route to Madurai. Lines 62 to 85 are the Brahmin's answer to this query :—

"Now, when King Sun, with his minister, late Summer, by their fierce heat have caused the natural goodness of the *mullai* and *kurinji* tracts to degenerate to the frightening and distressing semblance of *paalai*², you have come here with this tender gentle-woman."

¹ The lines that concern us here are lines 62 to 86 of the canto entitled 'Kaadu-kaann-kaathai (song of the Wilderness) of the 'Madurai-k-kandam' in the *Silappadikaram*

² M. Krishnan, who has provided the English rendering of the *Silappadikaram* lines given above writes: "Ilangovaligal's celebrated epic, *Silappadikaram*, was probably written some 15 centuries ago. There are earlier works in Tamil literature but what is notable is that even the earliest extant poetry is highly developed in prosodic conventions and content and establishes a considerable body of literature anterior to it, now irretrievably lost. Even in the earliest poetry that has survived to us, the naturalistic conventions of *tinai* (தென்) are closely observed. As per these conventions the land was divided into 5 broad tracts, and the several physical, human and cultural attributes of each tract detailed, mainly to indicate the settings and trend of lyric poetry in each tract, but this was no artificially imposed environmental specification—the description of the terrain and waters and flora and fauna of each tract, and even of its peoples and their mode of life (though, inevitably, this mutable factor has changed entirely with the growth and intermingling of human populations and human occupations of natural forests during the past few centuries) closely follows nature: even today it is difficult to conceive of a more natural ecological taxonomy, and for the purpose of this note it is necessary to outline the taxonomy of *tinai* briefly. Of the five tracts, four are specified and the fifth is residual. The four main tracts are :—*marutham* (மருதம்) consisting of human settlements and agriculture and other environs: *mullai* (மூலை) consisting of plains forests and pastures (where cattle

Should you cross this boulder-strewn, hillocky, inhospitable vast terrain along confusing (difficult) paths, and reaching the tank common to Kodumbai¹ and Nedungulam, traverse beyond its bund, you will come to a trifold junction, like the trident borne by the god who wears the moon in his hair : should you take the right-hand fork and proceed farther, to a wilderness where there are spreading-crowded *maraam*² and dry-crowded *omai*³ and bark-fissured *uzhinji*

were herded) and their surrounds : *kurinji* (குறிஞ்சி) comprising hills, hill-forests and their surrounds, and *neithal* (நெய்தல்) consisting of the sea and the coastal areas. The fifth residual tract consists of all land not identifiable as belonging to the four tracts mentioned above and is called *paalai* (பாலை) : it consists mainly of arid, thorny scrub and stony or sandy wastes. From descriptions of the flora of tracts definitely identified in old Tamil classics such as *Nedu-nal-vaadai* and *Malai-padu-kadaam* it is obvious that profound changes have overtaken the wild vegetation in these locations and that the denudation, even devastation at times, has been wholesale. To go by contemporary records of the flora of a location in assessing these ancient accounts is neither fair nor intelligent. But why go so far, within our own lifetime we have seen forests devastated and completely denuded, and *mullai* and even *kurinji* converted in a few years into arid, barren *paalai*. This is specially true of Pudukkottai, where the large scale denudation of its plains forests has been a feature of its recent history."

1 Kodumbaaloor (Kodumbalur). The location is specifically indicated.

2 *Maraam* (also *maraa* and *maraa-maram*) it is generally agreed, is the *ven-kadambu* (வெண்கடம்பு). In the *Manual of Pudukkottai State*, Vol. II, Part I (1940) this is identified, incorrectly, with *Barringtonia racemosa*. Even today we find *Barringtonia* in the tanks and tank-sides in Pudukkottai but the species found is not *racemosa* (which likes a saline habitat) but *acutangula*. No doubt *B. acutangula* has a widespread crown but it is neither *kadambu* nor *ven-kadambu*. Its Tamil name is *adampu* or *adambu* — today it is often called *kadappai* as at Vedanthangal. *Ven-kadambu* is *Hymenodictyon excelsum*, a large tree. It could very well have been there, in Kodumbalur, long ago. It is deciduous and has a spreading crown, and would have been prominently leafless and with its top boughs outspread late in summer. Note that another tree of the same family is also called *Ven-kadambu*, *Nauclea cadamba* now termed *Anthocephalus indica* (it was *A. cadamba* for a while). Gamble gives this description: "A large deciduous tree with clean cylindrical stem and horizontal branches...fragrant flowers in handsome large globular orange heads". It was apparently this tree that Nakkeerar describes in his *Nedu-nal-vaadai* as being a feature of Madurai in dense groves—in classical Tamil Madurai is called *Kadambavanam*. It must be one of these two trees that is referred to here—no *Barringtonia*. (M. Krishnan).

3 Dr. U. V. Swaminatha Iyer in his சிலப்பதிகார மூலமும் அரும்பதவுரையும் அடியாருக்கு நல்லாருரையும் (1968) merely says "ulariya thalaigalai udaya omai", i.e. the *omai* with the foliage of its crown dry. *Omai* means only the mango and no other tree. The *Manual* confirms this; it says : "the mango" but misses the significance of the foliage being described as dried up. The mango is an evergreen. The specification of its crown being dry-leaved indicates the severity of the summer

4 Possibly a type of *Aebizzia*.

trees, and dry-culmed bamboos¹ and the striped² maral lying shrivelled on the ground, and where thirsting deer stand calling mournfully,³ and where *Maravar* hunters live, and passing beyond this difficult tract, proceed further, you will see a resplendent hill before you, Thennavan's Sirumalai,⁴ where paddy and mature, break-hard sugarcane, and *tinai*⁵ ripe for the harvest, and *varagu*⁶ in the fields, and *Kaayam*,⁷ and turmeric, and the lovely *kavalai* creeper, and bananas, and betel-nut palms, coconuts hung low with fruit, and mango and jack trees crowd the slopes."

¹ No doubt *Dendrocalamus strictus* : *Bambusa* is a bamboo of denser hill forests.

² The adjectival 'striped' makes this unmistakable : The bowstring hemp (*Sansevieria roxburghiana*) : in the old days its fibre was used for the strings of the *yaazh*.

³ M. Krishnan writes : "I think the description of thirsting deer standing around calling mournfully to one another is realistic. These deer could only have been chital. No other deer known to the south is gregarious—from the context it is evident there were quite some deer there—and also vocal by day. Chital, in areas where they are hunted, as they were and are in Pudukkottai, would have waited for the cover of darkness to come down to the Kodumbalur tank and slake their thirst—as they do in dry summer in Taroba today."

⁴ These lines refer to 2 distinct areas, the Kodumbalur area and the Sirumalai hill in the Madurai district, outside Pudukkottai. The contrast between the cultivated opulence of Sirumalai and the wild, parched barrenness of Kodumbalur is evidently a carefully-contrived piece of poetic imagery. (Sirumalai is outside Pudukkottai district). Sirumalai hill-bananas have long been famous and are still well known. Areca palms, coconuts, mango and jack all are features of hilly terrain.

⁵ *Tinai* was a much-grown and much-fancied crop in hilly tracts in the old days—it is a species of *Panicum*, probably *P. miliaria*. According to mythology, Valli was guarding a field of this small millet when Subramanya saw her.

⁶ *Varagu* (*Paspalum scrobiculatum*) was, like *Tinai*, extensively cultivated in hilly areas in the past. The reference to paddy is obviously to some ancient strain of paddy that would grow on comparatively dry and well-drained soil. Turmeric can be, and is, cultivated on hill slopes.

⁷ Dr. Swaminatha Iyer identifies *kaayam* as garlic. M. Krishnan writes : "I think he is mistaken in this. My old, disintegrating dictionary (1901), which I have found very reliable, gives the following meanings, *inter alia*, for *kaayam* : *kadugu* (the Indian mustard, *Brassica juncea*), asafoetida, pepper and *ven-kaayam* or *vengaayam*, onion and *not* garlic. I believe both the onion and the garlic are exotic, and while they might have been introduced centuries ago, I doubt if the garlic was there in the South in Ilango's days. In the circumstances, I think it likely that the *kaayam* here refers to the *kadugu*, much cultivated on hillsides. The account of Sirumalai in these lines seems true to nature and was probably truer still long ago."

By this time the Pudukkottai tract had both cultivation and barrenness, both active farm endeavour and pastoral *ennui*, representing *konadu* and *kanadu* characteristics. Agriculture had, apparently, reached a stage of development in which the soil could produce not only one or two staple cereals, but vegetables, condiments and fruit.

Since the ecological taxonomy of the passage from Silappadikaram has been found to be reliable, it would seem equally safe to glean information from it on the social and cultural condition of this area at the time. The references to the female ascetic Kavundhi and a Brahmin wayfarer would show that apart from the agricultural and agriculture-supported classes (including the mercantile, political and ruling classes at places such as Madurai) the tract also had by this time people with purely spiritual and intellectual occupations. Society in the Pudukkottai area in the first two or three centuries after the Christian era, therefore, had already reached maturation at the level of material occupation and was poised to afford other worldly pursuits by some of its members. But the main springs of such inspirations was Hinduism.

Disputes among the Vellalars.—The *konadu* and the *kanadu* Vellalars after living in peace and plenty for a long time fell prey to internecine disputes among them. These concerned the use of land, temples, tanks and rights to the waters of the Vellaru. Such disputes were inevitable, for the *konadu* Vellalars had enjoyed much more prosperity and power as a result of the natural advantages of their tract than their brethren in *Kanadu*. About this time the *konadu* regions were under the following seven chieftains: Sammatirayar, Kadambarayar, Maluvarayar, Kongurayar, Kalingarayar, Achyutarayar and Kumatarayar. During these, the most prosperous days of the *konadu* Vellalars, Radhakrishna Aiyar informs¹ us, the *konadu* chieftains were able to assign lands to 212 temples and 21 whole villages to Brahmins—a remarkable exercise in landed power. During the same period, the *kanadu* assignments to temples and to Brahmins numbered only 16.

¹ *General History of the Pudukkottai State* (1916) by S.Radhakrishna Aiyer.

Power feeds the appetite for more power and we find the konadu Vellalars rising on what, K.R. SrinivasaIyengar has called "the wings of contrivance and complexity" to advance themselves by weakening the already weak kanādu Vellarlars. This forward move on the part of the ambitious individuals of Pudukkottai was not impelled by lofty motives by nonetheless, was tinged by an element of inevitability about it. Had konadu not tried to cut into kanādu it is conceivable that barrenness caused by natural phenomena like famine and the doings of hunters or marauders might have regained its hold over the farmed but susceptible tracts setting at naught the results of centuries of careful husbandry. Moreover, this animosity served, unwittingly of course, another valuable historical purpose which will be described presently.

The Coming of the Maravars And Kallars.---But kanādu did not give up without a fight. When the konadu Vellalars with their superior man-power entered kanādu lands, the latter turned for much-needed help to Maravars from the Ramanathapuram area south of their region. When this became available they promptly began a counter-attack on the fertile fields of the northern Vellalars who, like the kanādu Vellalars before, had to turn to other Maravars for similar assistance.

The Maravars have been described¹ in the ancient classic *Kalittokai* as "of strong limbs and hardy frames." Says the poet : "Fierce looking as tigers, wearing long and curled locks of hair, the blood-thirsty Maravar, armed with the bow bound with leather, ever ready to injure others, shoot their arrows at poor and helpless travellers, from whom they can rob nothing only to feast their eyes on the quivering limbs of their victims ". They were so numerous, specially on the east coast between the Cauvery and Vaigai rivers, where they are still to be found in large numbers, that they successfully resisted to the armies of the Tamil kings. "The wrathful and furious Maravar," says the Poet quoted above, "whose curled beard resembles the twisted horns of the stag, the loud twang of whose powerful bowstrings, and the stirring sound of whose double headed drums, compels even Kings at the head of large armies to turn their back and fly."

¹ Quoted by Kanakasabai Pillai in *Tamil's Eighteen Hundred Years Ago* (1904).

These Maravars did not, of course, offer their help gratis. The Vellalars finding them quite useful as protectors of their interests, encouraged them to stay on in the Vellala territories by offers of land-grants which were readily availed of.

On the heels of the Maravars, came the Kallars. But they do not appear to have been invited as the Maravars were. Made of the same mettle¹ as the Maravars the Kallars were glad to offer their services to the Vellalars in their fights against one another on payment. They are described in the *Ahanamuru* as a fearless and uncivilized people that lived originally in the mountains about Tiruvenkatam or Tirupati, capturing elephants in these mountains with great skill and exchanging their white tusks for grain. Their leader, Pulli, is described as being very dextrous in taming violent uncontrollable elephants. Radhakrishna Aiyar writes :² "The Kallars are first heard of in connection with the north-eastern portion of the State. An important section of the tribe seems to have moved southwards from a town of the name of Tirumangalam in Valliappanadu of North Konadu and was permitted to settle down at Udayalimangalam (now called Udayalippatti) near Kunnandarkovil, ten miles to the east of Kiranur. In course of time the Kallars seem to have made themselves masters of Visenginadu in the north-east of the State. They must have been a very violent people, who paid no heed to the rights of others and made themselves very troublesome to the people among whom they settled. From an inscription at Kunnandarkovil, it is seen that the people of the place the workmen, the agriculturists and others—assembled the leading men of the Nadu and of the neighbouring parts, and, having invited learned and influential men from such distant places as Srirangam and Tiruvanaikka, probably for consultation, explained to them the loss of life and property that the Kallars were causing and obtained a guarantee for their safety subject to the condition that they should make an annual payment of a vettu coin to the God and present to the temple at Kunnandarkovil, a ring and a panam whenever a marriage was celebrated. Similar disturbances occurred at Sottuppalai in Alangudi Taluk, where the condition laid down

¹ The Kallars, Maravars and Agambadiyars are called together the 'Mukkulattor' or members of the threesome community.

² A general History of the Pudukkottai State.

for the promised protection was an annual payment and a ring alone to the temple for every marriage. The tradition that the Vellalars of Alangudippatti near Puliur left the village in a body, instead of degrading themselves by giving one of their girls to a Kallan who demanded her in marriage, is quite in keeping with what we learn of the Kallars from other sources ”.

The enmity that existed between the konadu and kanadu Vellalars erupted in several encounters in the south-west portion of this territory. Vanadirayar, a kanadu chieftain, engaged Kallars in fights in one of which 50 of them were left as dead. They received some tracts in Palaiyanadu as பழிக்காணி or land grants in return for men killed. On other occasions like this, more lands were granted.

A document referring to the grant of the villages Kundradirayanpettai, Kuppavakkurichi, Picchankurichi and Melakulam gives the following detailed account of the services they rendered to Vanadirayar in his struggle with konadu Vellalars: “Vanadirayar of Vandrakottai and his brother Kundradirayar of Vallattirakottai, having quarrelled with the Karkatta Vellalars of Konadu about lands, temples, tanks, temple honours and the right to the use of the water of the Vellar river and on account of some Kallars also, the Konadu Vellalars of Kannimalai, Orukkumbumalai, Thirukkalakkudi, Varappur, Piranmalai, Karaiyur, Nerinjikkudi and Kudumiamalai to the north of the river as also of lands to the south assembled 10,500 men to take possession from the Kanadu chiefs of the following lands to the north of the river—viz., Valnad, Palaiyanadu, Senkattunadu, Perungulurnadu, Ambunadu, Tanavanadu, Kayanadu and Kilvanganadu (?), stating that the land to the south of the river Chola land, and that they wanted the whole of the Chola Vellala land for themselves. They first sent for Vanadirayar, who, without heeding their invitation, assembled the men of the eight Nadus mentioned above, and, finding that they numbered only 4,500 men, sent for 1,000 Kallars of Visenginadu, with a promise that he would grant them lands and the right of watching some nadus. The Kallars, 575 in number, joined him. At first he stationed half of his men at Tiruvarankulam and the other half at Maniambalam, and placed the Kallars between the two wings.

But thinking probably that he could with more success resist the Konadu men from the south decided upon crossing the Vellar and occupying the Poram fort to the south of the river. The Konadu men breached the big irrigation tanks of Kavinadu, Perumanadu and of Peraiyur so as to render the Vellar unfordable. But Vanadirayar succeeded in taking his men and the Kallars to the south of the river, and concealed for a time his men in the bushes and three of the jungles in the adjoining parts "

There were free fights between the men of the two parties as Tekkattur Munaisandai, Perungudi, Kulakkudi, Miratnilai. Five or six hundred of Vanadirayar's men were wounded. Visenginadu Kallars there upon fiercely attacked the Konadu men, and, defeating them, drove them as far south as Suraikkudi twenty miles to the south of Pudukkottai and as far south west as Piranmalai, seized the seven chiefs of Konadu and brought them before Vanadirayar and his brother Kundradirayar. Four hundred and ten men were killed in all in these fights, of whom seventy-five are said to have been Kallars.

Hegemony of the Tamil Kings.—The Vellaru river formed at this time the boundary between the territories of the Pandyas and Cholas, "though the whole tract was often under the rule of the Cholas and only occasionally under the sway of the Pandyas".¹ There were some local chieftains also such as Vanadirayar. In addition there were vassals or feudatories under the Cholas or Pandyas, enjoying varying degrees of independence. Inscriptions and documents relating to the Vellalars show that when these parts were in the Pallava dominions,² they were divided into 'kootrams'. The konadu apparently had three : Uraiur, Udiyur, and Urattur. The kanadu had two : Milalai and Atali. After about A.D. 1000 the Cholas and Pandyas divided the tract into Valanadus (division) and Nadus (Sub-division). Each Nadu contained a number of villages. According as these 'ur' were under Chola or Pandya

¹. *A General History of the Pudukkottai State* (1916) by S. Radhakrishna Aiyar.

². Romila Thaper says (*A History of India*, P. 169) : "...the early Pallavas encouraged the clearing and settling of new land, no doubt having realised the advantages of agriculture, both in tax and produce, as against a largely pastoral economy". Also, as Minakshi indicates (*Administration and Social Life under the Pallavas* ; P. 12) the term 'kadavan' on 'kaduvetti' often applied to the Pallavas speaks of the civilising work in forest tracts.

rulers, their names often underwent change. The changed names were often expressive of Chola or Pandya victories. Irumbanadu could thus be under the Rajendra Chola Valanadu at one moment and under the Rajaraja Pandya Valanadu at another.

Of administration in Chola villages in this period, K.A. Nilakanta Sastri says :¹ " The village as a whole was responsible for the payment of the entire revenue due from it to the king's officers. The process of collection was sometimes harsh, and villagers had reason to complain of their treatment by royal officers even in the best days of the Chola empire. When central control weakened, local oppression became more unrestrained, and instances are known of people from villages in an entire district meeting together and deciding upon common action to resist arbitrary and unusual imposts. The revenue was collected in cash or kind according to convenience. Besides land revenue there were tolls on goods in transit, taxes on professions and houses, dues levied on ceremonial occasions like marriages, and judicial fines. Besides these public dues of a general nature, sections of the people often agreed to tax themselves voluntarily for some particular object they had in view".

Local Chieftaincies.—But while this was the broad administrative organization and structure in Chola and Pandya times, inscriptions show that by the tenth and eleventh centuries, the tract around the river Vellaru, continue to be governed by local chieftains or Araiyaar. They were more numerous to the north of the Vellaru than to its south. They held the lands in trust for the central authority, defending them against his enemies in war time and collecting royal taxes during peace time. A proclamation, dated Saka 1348 (or 1426 A.D.) on the walls of an old temple at Palaiyur near Alangudi runs to the effect that the Arasu (Araiyaar) would, in addition to the royal taxes, be satisfied with 60 kalams of paddy to be paid in annual instalments, that he would not demand from them more under the pretext that they were wealthy and that the proclamation should be in force "as long as the sun and moon endure". These Araiyaars invariably overshadowed² the village assemblies. Often because they were unable to protect themselves

1. *A History of South India* by K. A. Nilakanta Sastri (1955).

2. *A General History of the Pudukkottai State* (1916), by S. Radhakrishna Aiyar 78.

from the aggressive designs of powerful neighbours, the villages would surrender their பரிகாவல் (padikaval) rights or the right of protecting the people, their property, and crops to the Araiyaars. "It is to be presumed," says Radhakrishna Aiyar, "that in the days of the Araiyaars, the central authority of the Cholas and the Pandyaas was not much felt in these parts but that the Araiyaars with the people managed things just as they pleased". These chiefs served as the axle of the wheel of the elaborate administrative structures of the Cholas and Pandyaas, justifying the observation of Dr. Fleet in *Canarese Dynasties* that "the history of the supreme dynasties would not be complete without a detailed notice of some of the more important feudatory families by the agency of which the paramount sovereigns carried on the administration of their dominions".

It was at about the time when the central power of the Cholas and Pandyaas in their respective domains was at an ebb that the 'Kalabhra interregnum' occurred. This period has been placed¹ by Nilakanta Sastri between the fourth to the sixth century A. D. Very little literary or epigraphic evidence enlightens this period with the result that it has been described as a 'dark age'. There are varying opinions on the Kalabhra invasion and identity. It is said² that they came from their native confines at Sravana Belgola, moved further east and set up a kingdom which included the modern Bangalore, Kolar and Chittoor districts, whence they pushed themselves into the Chola and Pandya Kingdoms, overthrowing the Tamil monarchies. At this time, Pudukkottai saw a line of feudatory chiefs rise to eminence.

The Irukkuvels of Kodumbalur.—In his book *The Early History of the Vellar Basin* (1954) M. Arokiaswami specifically deals with this line, the Irukkuvels. He argues that the Irukkuvels were one among the host of Vel or Velir families who had settled down in the South in Sangam times, playing a very important role in the moulding of early south Indian history and politics first as the supporters of Pallava hegemony and then that of the imperial Cholas, serving the former as powerful feudatories at Kodumbalur and the latter as responsible officers. The Irukkuvels apparently came to their own

1. *Pandya Kingdom Chronological Summary*, P. 258.

2. K. K. Venkat. rama Ayyar in *A Note on the Kalabhras*, Paper read before the Archaeological Society of South India, on 20th December 1955.

at Kodumbalur when the Kalabhras are believed to have put the Tamil kingdoms into the shade. Some of the mist which hang over the details of Kalabhra rule has covered the Irukkuvels also. But with the help of inscriptions¹ relating to an Irukkuvel chronology, Arokiaswami has attempted a valuable reconstruction of their geneology and history. According to this, the period of the first recorded Irukkuvel ruler is assigned to the first half of the fifth century A. D. and the last in the eighth century A. D. Of eleven Irukkuvel rulers thus mentioned as ruling from Kodumbalur the most significant are Paradurgamardana (c. 615-645 A.D.), Samarabhirama (c. 645-675 A. D.) and Bhuti Vikramakesari (c. 675-705 A. D.). The first of these ruled co-evally with the Pallavas Mahendravarman and Narasimhavarman and was very likely one of the 'three allied kings' who fought alongside Vikramaditya against Pulakesin, the Chalukya king. The next, Samarabhirama, claims to have killed the Chalukyan ruler in a battle with which event began the decline of the Chalukyas and the rise of the Pallavas. Another claim for Vikramakesari in this inscription is that he conquered a Vira Pandya. From a strictly chronological standpoint this must refer to the Pandya king Arikesarivarman (c. 670-710 A. D.), but the identification cannot be held conclusive. By the time of Bhuti Vikramakesari, the supremacy of the Pallavas had given way to that of the Cholas, in the bid for their second empire. The inscriptional evidence at Kodumbalur reveals that Vikramakesari 'destroyed the Pallava army on the banks of the Cauvery'. Arokiaswami observes : "Vikrama's support of the Chola cause seems to have been more close than the support given by his predecessors to the cause of the Pallavas. Of the two wives associated with him in the Kodumbalur record, Karrali was most probably a Chola princess, as is apparent from the names of his two sons by her, Parantaka and Adityavarman, which are characteristically Chola names.' Inscriptions of this period show how the Cholas administered their distant provinces. One such as Tirumalpuram referring to the difference between the village assembly and the temple management records the centie's decision in the matter under the signatures of a number of Irukkuvel officers.

¹. At the Muvarkovil, Kodumbalur (See Chapter XIX).

When political conditions were favourable and the Irukkuvels became by and large a self-governing entity, the Vellala settlers in the basin of the Vellaru rose in aristocratic position. Coming as they did as a cultivating class, the Vellalars in their Irukkuvel form graduated, in due course, from their original status of nilattarasu to mudiarasu, or very nearly that. This vertical progress is to be ascribed both to the fertility of the basin that brought wealth and power to its husbanders, as also to the industriousness and powers of initiative and contrivance that marked out the Vellalars. 'Sharpening the ploughshares into swords' is something they were adept at—a felicity that was recognized and utilized by the Pallavas and Cholas with advantage.

The significant factor about the political situation of this time was that the feudal chiefs were endeavouring to fight free of the three well-known crowned kings of the period—Pallava, Pandya and Chola. The numerous engagements between such chiefs as the Irukkuvels against one or the other of these kings have been regarded by Arokiaswami as "a fight between subjection and independence". He feels, in fact, that the term Kalabhra itself might refer to the general disturbance caused by none other than the important chieftains of the period in alliance against the central powers.¹

The Muttaraiyars.—Another line of influential chieftain which in these centuries ruled the borderland between the Pandya and Pallava kingdoms, was that of the Muttaraiyars. The origin of the Muttaraiyars is a matter of controversy. Some associate them with the Kalabhras and as the successors of the three great powers—Chola, Chera, Pandya. The last word is yet to be said on the subject. According to R. Sattianathier², "The Muttaraiyar ruled over Tanjore and Pudukkottai as the feudatories of the Pallavas from the eighth century to the eleventh." Sendalai, a small village near Tirukkattupalli was apparently their centre. There are pillar inscriptions in Sendalai which, along with those in Pudukkottai district, help trace the role of this line. They appear as vassal

1. "The Tamil word *Kalavaram* which means, 'disturbance' perhaps aptly describes the situation created by the Kalabhra intrusion", observes Arokiaswami on p. 69 of *An Early History of the Vellar Basin*.

2. *History and Culture of India* (Volume III), Bharatiya Vidya Bhavan: (1954).

chiefs of the Pallavas, Pandyas and Cholas, according to the trends of contemporary politics until their extinction at the hands of the Chola, Vijayalaya about the middle of the ninth century. It has been observed¹ that the capture of Tanjore by Vijayalaya Chola destroyed the powers of the Muttaraiyars who were ruling the tract as vassals and supporting props of the second dynasty of the Pallavas, having played a prominent part in the installation of Nandivarman II Pallavamalla on the Pallava throne when Paramesvaravarman II died, and having become their chief feudatories (Peradiaraiyar). There is evidence of considerable co-operation between the Irukkuvels and the Muttaraiyars.²

Socio-Cultural Activities.—Whenever a village in these times enjoyed freedom from war, it was a little self-contained unit of administration. The temple management rose as an institution independent of the village assembly. The temple became the centre of social and economic activities being very often built and maintained through donations of guilds and merchants. Sometimes villagers themselves would also raise small temples. The tradition of kings ordering a temple to be built continued, of course, providing employment to artisans. The old rock-cut pattern now came to be replaced by free-standing stone structures, with stress on the sanctum which was approached through colonnaded halls and surmounted by a *gopuram* or *shikhara*.

The period c. 900 to 1300 A.D. is a most eventful period in the field of creative endeavours and raw-material utilization. The Irukkuvels and Muttaraiyars were, in the words³ of K.V.Soundara Rajan, "the harbingers in the district of the nuclei of viable architectural and sculptural traditions, drawn from the

¹ *Historical Sketches of Ancient Dekhan* (Volume II) by K. V. Subrahmanya Aiyer (1957).

² The reference in the Sendalai inscription to Kodumbalur lying in 'unfriendly' hands is explained by Arokiaswami as implying that Kodumbalur by the time this epigraph was incised had passed from the Irukkuvels to some other line perhaps the central power directly.

³ In a note for the *Pudukkottai District Gazetteer*.

progenitor movements of the Pallavas and Pandyas and enthusiastically prompted and carried forward by the two vassal clans." The spurt of creative activity is to be seen in the emergence of temples in Pudukkottai as at Kudimiamalai, Malayadippatti, Kunnandarkovil, Tirumayam, Malayakkovil, Tirugokarnam Narttamalai, Kodumbalur, Tirukkattalai, to mention only a few. The aesthetic output of this time reveals the working sophisticated ideas such as the selection of the best crystalline granite available for scooping out rock-cuts as at Sittannayasal and Tirumayam. The rock for structural temples involved quarrying principle not very different from those employed in an erstwhile age for megaliths but now was designed to produce sublimer dimensions such as pillars, cornices, lintels and had been organized to last. Hillock location for cave-temples and rock-selection for structural temples were done with care and expertise.¹ For miniature single-celled cave temples, however, such a good selection was not often possible. Temple constructions of the early stage in Pudukkottai district as at Enadi, Panangudi, Kannanur, Kaliyapatti were medium-sized.

All the monuments show the merit of a mastery over the chosen granite. By the time the Pudukkottai tract came under the sway of chieftains governed by the imperial Chola line, a well-established guild of stone-cutters, carvers and architects had come up who could cope with granite structural temples as a matter of routine and who were fully conversant with all the nearest sources of rock exposures for their enterprise.

R. Upendran, Assistant Geologist, Government of Tamil Nadu, who conducted a petrological survey of some of the archaeological monuments of Pudukkottai district in June 1975 for the *Pudukkottai District Gazetteer*, writes : " Most of the monuments

1. " In Malayadipatti, however, where at an almost coeval period two cave temples for Siva and Vishnu (Anantasayi) respectively were called for, they had necessarily to run the risk of taking the only existing twin boulder outcrops as they came and had to contend with a massive oblique laminational crack on the rock where the Saptamairs had to be sculptured", writes K. V. Soundara Rajan in his note for the *Pudukkottai District Gazetteer*.

in Pudukkottai district are built with pink granite and mixed gneiss associated with pink granite. Hillocks and massifs of pink granite were chosen for the construction of temples and sculptural work. The source of rocks for building various monuments is local in Pudukkottai district. The monuments are either built-in structures or built with rocks, available within a few kilometres. The source of grey granite, mixed gneiss with grey granite association found in some of the monuments is not probably in Pudukkottai district. The effects of weathering on the monuments are negligible."

The Pudukkottai tract being a buffer zone under political feudatories of prestigious dynasties, it became something of a cultural enclave where the prevailing styles in architecture and sculpture could be experimented with—its rock wealth being an additional advantage. Pallava and Chola art-forms and architectural features coalesced here, the Irukkuvels and Muttaraiyars heaving served, at places such as Kodumbalur and Narttamalai,¹ as conduits for the inter-mingling of artistic traditions. Pallava-Irukkuvel-Chola connections and Chola-Muttaraiyar-Pandya connections are to be discerned in the architecture of this period in the region. "Whether the Cholas had already become alive to the artistic sense or not", Arokiaswami writes, "the passing of the Irukkuvels under their sovereignty played a decisive part in moulding the Chola architectural achievement at least from the time of Aditya onwards."

Merchant Guilds.—At the centre of the village's social and economic life, the temple began to reflect social developments. The most significant of these in this period was the rise of a well developed social stratification set off, presumably, by occupational guilds. The beginnings of caste-consciousness in social relationships can be clearly seen taking shape in this period.

¹ Writing about the Cholisvaram temple at Narttamalai in *The Hindu*, dated 8th November 1970, J. Raja Mahomed, Curator of the Government Museum, Pudukkottai observes: "The peculiar style of the temple, partly Pallava and partly early Chola warrants our dating it as post-Pallava in point of time. But according to recent researches it is a Muttaraiya edifice. Muttaraiya constructions are much akin to those of their political masters."

Two Chola inscriptions¹ at Munisandai in Tirumayam Taluk, dated about 870 A.D. and 941 A.D. respectively refer to the 'Nanadesa Tisaiyayiruttu Ainnurruvar', a merchant guild that Nilakanta Sastri has described as meaning 'The Five Hundred Members of the Thousand Direction in all Countries'. These two epigraphic records are certainly one of the earliest known pertaining to merchant guilds in South India. An inscription (154th in the *Annual Report of Epigraphy for 1903*) at Piranmalai in the south-western boundary of Pudukkottai district gives a detailed account² of the Ainnurruvar. They are recorded in this as having visited all the 'countries' in India with eighteen towns under them and as being 'excellent lords of agriculture'. This inscription records the articles in which they traded viz., salt, paddy and rice, beans, red-gram, green-gram, castor, arecanut, pepper, turmeric, dried ginger, onions, mustard, gingelly, cotton, cotton-yarn, cloth, yarn, silk-goods, gunny bags, wax, honey, yak-tails, camphor-oil, perfumes, cattle, horses, elephants, iron. This range of trade is astonishing for the versatility of the Ainnurruvar. It also reveals as also for the variety in the articles of use prevalent at the time. The temple at Piranmalai, according to this inscription, had been granted the right to collect a cess on these articles—a form of single-point excise. The Piranmalai inscription mentions merchant guilds from other centres such as the 'Manigramam' of Kodumbalur, all of which met and made a grant to the temple of Tirukkodukunram or Piranmalai. Their coming thus together leads one to conclude that the several leading merchant guilds formed component units under the Ainnurruvar which was a sort of federal corporation. The merchant guilds were evidently quite free from the limitations of political boundaries. In the countries that they visited for trade, the 'Five Hundred' set up warehouses that were guarded by their own soldiers. Wherever they settled, they raised temples and instituted charities without prejudice to the various sects or religions.

It has been observed earlier that Jainism did not make much headway with the laity because agriculture was not conducive to a Jaina way of life. The Ainnurruvar in Pudukkottai, however,

¹ Pudukkottai State Inscriptions 61 and 71.

² See *Ainnurruvar* by K. R. Venkatarama Ayyar, Pudukkottai

are seen to have extended their patronage to Jainism although their main adherence was to Hinduism. The Jaina cave on the Melamalai at Narttamalai¹ which was afterwards converted into a Vishnu temple was called 'Padinenbhumi Vinnagaram', evidently after the eighteen towns of the Ainnurruvar. An inscription at Chettippatti, formerly Tiruvennayil, names the Jaina temple and monastery that once flourished there Ainnurruva Perumpalli, after the famous corporation of merchants. As K. R. Venkatarama Ayyar has observed in a paper on the Ainnurruvar, the Chettis and Chettiputras (Chettipillais, as they are also called) mentioned in inscriptions as constituents of this corporation have their homes in Pudukkottai. Silaya Chetti is another designation of the members of this corporation. Pudukkottai inscriptions refer to them as the chief mercantile class in the Narttamalaingaram. The patron goddess Aimpolil Paramesvari or Aiyapolil Nacciya was consecrated in the temple at Kallampatti in Pudukkottai about A.D. 1157 by a Nisadaraja Chief. Ainnurruvaravar is the significant name of the god at Mattur, a village near Karaikkudi, a few miles beyond the district frontier. He is the patron deity of some Chettiyar families in the district who to this day make votive offerings to this god whenever they conduct an auspicious ceremony or start a new business. The ancestors of the present Chettiyar community who carry on banking business in Burma, Malaysia and the former Indo-China seem to have been engaged in active trade through the corporation of the 'Five Hundred' with the countries in the Far East during a long period of five centuries.

It is significant that the old merchant guilds, neither individually nor as a corporate body, enjoyed direct political power. One possible reason was in the multi-caste composition of the guilds.² But this did not affect their commercial and social ramifications.

Religion and Caste.—With the spurt in temple-building and endowing activities, the brahmin's position was strengthened in the village. They were often exempt from tax, many of them owning

¹ See Chapter XIX.

² "The brahmin element in these guilds, which was not insignificant, was probably averse to challenging the political authority of the king, since they derived their financial capital from the land granted to them by the king." Romila Thapar in *A History of India* (1966); p. 209.



A characteristic scrub-covered outcrop of rock in Pudukkottai district.

PHOTO: P. R. Mohd. Bashe

land. "Unlike the north Indian brahmin landowners", writes¹ Romila Thapar, "the southern brahmins were more adventurous and invested their surplus income in commerce." But their basic stronghold and platform for the enjoyment of local prestige and power, was the temple. Radhakrishna Aiyar observes² ".....there were about one hundred temples within the limits of the (Pudukkottai) State that were well-endowed. In connection with these temples, temple priests both of the Saiva and Vaishnava Caste and other Brahmins are mentioned, showing that as soon as a temple was built at a place Brahmin families were, if necessary, imported into the (Pudukkottai) State to settle at the place. In these ways it is clear that there was a fair proportion, of Brahmins in the (Pudukkottai) State before the fifteenth century, especially in places where there were temples." Having come as keepers of Vedic culture the brahmins became, soon enough the keepers of peoples' consciences whether they were kings, Araiyaars, or common folk, exercising power by virtue of their supposed specialisation in the matter of communicating with the divine power. Kings and chieftains who naturally "sought the highest respectability available by conforming to tradition",³ made liberal grants to the brahmins.

Temples sustained another community: the Devadasis. These were women who, not unlike the vestal virgins of Rome, were dedicated to temples at birth. The more talented among them were trained to become exponents of the Bharata Natya dance-form,⁴ which included complex rendering of religious themes. There is no indication in any records pertaining to this period of the exploitation and resultant degeneration that marked their lives subsequently.

The Vellala population of the Pudukkottai tract appears to have been at peace with this milieu. Most Vellalas are believed to have been Salvites, some of the powerful Vellala landlords granting lands to Brahmins and endowing temples such as those at Tiruvarangulam, Kudumiamalai, Kunnandarkovil, Vatavalam, Kalasamangalam.

¹ *Ibid* pp. 211-212.

² *A General History of the Pudukkottai State.*

³ *A History of India* (1966) pp. 183-184 by Romila Thapar.

⁴ See under "Sittannavasal", in Chapter XIX.

But while the central character of all religious activity in this period was Hindu, the Pudukkottai territory bears the impress of Jaina influences that worked more or less simultaneously. The *Periyapuranam* speaks of a host of 'Karnataka Jaina' pouring into Madurai like a cloud-burst preceding, presumably, the formation in that city in A.D. 470 of the Dravida Sangha of the Jainas. Among the followers of the creed propagated from this centre were Pandya and Pallava princes, of whom Mahendravarman I (C. 600—630) is the most prominent. Images and fragments of images of Jaina figures are found scattered throughout the district to this date, in places such as Vellanur, Tiruppur, Ammachatram, Kilattaniyam, Tenimalai, Narttamalai, Annavasal, Chettippatti. An inscription on a boulder standing opposite to the Andarmadam on the Tenimalai hill speaks of the endowment of four and a half *velis* of land by an Irukkuvel chieftain for the maintenance of a Jaina monastery in honour of the Jaina ascetic Malayadhvaja. The inscription indicates that the chief from Kodumbalur paid homage to Malayadhvaja who was performing austerities at Tenimalai. Two Jaina scholars, Dharmadevacharya and Kanakachandra Pandita, are referred to twice in inscriptions from Aluruttimalai and Ammachatram. These, along with the Jaina vestiges at Narttamalai and Chettippatti, and the cave-temple at Sittannavasal, all go to show the active continuance of Jaina activities in the tract until the ninth century A.D., when Jainism began to fade in the region as, indeed, in the rest of south India. It gave place to the *bhakti* movement or the devotional cult of the Tamil saint-singers which stressed a personalized relationship between God and man. Their hymns, dedicated to Siva and Vishnu, respectively, have been preserved in the sets of separate collections called the *Tirumurai* and the *Nalayiraprabhandam*. One of the Nayanars (the Saivite saint-singers), Appar, is believed by tradition to have convinced the then Jainism-inclined Pallava king Mahendravarman of the superiority of Saivism over Jainism, and in fact converted him to Saivism. Another Nayanar, Sambandar, it is said, went on a spiritual tour of the Pandya country² which was under a strong Jaina influence

¹ See under "Avadaiyarkovil" in Chapter XIX.

² Which included, at this juncture, much of the present Kulathur taluk of Pudukkottai district, notably Sittannavasal.

and vanquishing Jaina monks in debate, converted the king and several of his subjects to Saivism. Radhakrishna Aiyar states : "It may be surmised that when the Jains were subjected to persecution by the Pandyan king at the instance of Sambandar, the Saiva hymnologist, in the seventh century A.D. many of them fled to these parts (Pudukkottai) that were covered by forests, hoping to live unmolested in their new settlements. The Jaina population must have gradually decreased till at last at present we find that there is no Jaina population at all....."

But while the Hindu devotional cults stimulated the decline of Jainism, the impact of the latter is to be seen operating vicariously in the new cult's implied rejection of the established order of society and the stratified caste-structure then prevalent. The cult of the Nayanars and Alvars ran parallel to brahmin orthodoxy if not counter to it, and met with widespread support from the lower castes. It can be viewed as being, at least in part, a resistance to the sanskritisation of the region as represented by brahmin priesthood that propogated esoteric Hindu doctrines through sanskrit. The saint-singers used Tamil and ignored caste regulations.*

Another strident form of non-conformism was now witnessed in the rise of the Kalamukha cult, an extreme Saivite movement with a margin of magical and almost tantric features. Bhuti Vikramakesari (675-705 A.D.) of Kodumbalur is recorded in an inscription at the Muchukundesvara temple as having presented a big *matha* of eleven villages for feeding fifty ascetics to Mallikarjuna, chief ascetic of the Kalamukha sect.

These trends in Hinduism signified a parting of the ways between the philosophical aspect of Vedic thought as represented by the brahmins and the more popular forms of Hinduism (Saivism, in particular) which carried great weight with the unlettered population.

* *A General History of the Pudukkottai State*

† Appar was a Vellala: Sundarar and Sambandar were brahmins, but Sundarar, although a brahmin, did not marry a girl of his own caste, falling in love instead with two women, one a dancing girl from Tiruvallur and another a *Sudra* girl of Thiruvettiyur.

Social and political organisations in these parts remained largely undisturbed until about the twelfth century when both the central Chola power exercising sway over the Puaukkottai tract, as well as the local Irukkuvels began to decline. An event which precipitated the process was the invasion of these territories by the Sinhala general Lankapura, who had been invited by one of the claimants to the Pandyan throne, Parakrama in his fight against a rival, Kulasekhara. Lankapura, in a fertrious pursuit of Kulasekhara ravaged large parts of the Pudukkottai tract *en route*, and in particular, Ponamavarati, where his troops set ablaze a three-streayed building, many houses and barns full of paddy¹. Not content with his participation in the war of Pandyan succession (1170), Kulasekhara bade fair to displace the Chola in his kingdom. An inscription² in the Pudukkottai district dated in the reign of Rajadhiraja II, the reigning Chola monarch, informs us that he sent out a force in support of Kulasekhara and against Lankapura, under the command of a Pallavarayar. The war thereafter spread within the boundaries of the present Pudukkottai district where after fiery engagements around the Vellaru, Kulasekhara was defeated. This disaster shows that the once-great Chola power was unable to defend itself, that the power and influence of the Irukkuvels was fading away from power and influence and that a new line of chieftains called Pallavarayars were taking the place of the Irukkuvels in the service of the Cholas.

Inscriptions show that the Pallavarayar who was sent out to meet Lankapura, did manage to retrieve many Chola areas from the foreigner. The Pallavaraya commander's success was rewarded by the Chola king, who gave him his daughter in marriage and set him up to rule over the territories reclaimed from the Sinhala forces³. This individual apparently inaugurated a powerful line of rulers in the Pudukkottai tract, who continued to side with the Cholas for some time, later switching over to the Pandyas and in general they became an independent force to reckon with. In

1. For a fuller account of this war see S.K. Iyengar's *South India and the Muhammadan Invaders*.

2. A.R.E. 1899-1900, p. 27.

3. Nilakanta Sastri, *Pandyan Kingdom*, pages 132-133.

1231, no sooner had the tract recovered from the ravages of Lankapura's invasion, that the Pandyan Maravarman Sundaras, invaded the Chola territory from the Pudukkottai area, bringing the territory under Pandyan rule.

Two Tamil works¹ refer to the Pallavarayars as originally hailing from Mahabalipuram and Vaittur and after a series of victories over some chiefs, to have settled in lands not from the present Pudukkottai town. The Pallavarayars seem to have slowly extended their territories and power until they were masters of the tract from Adhanakottai to Kavinad and from Kalavaippatti (ten miles east of Pudukkottai town) to Kudumiyamalai. One of these works refers to the names of eleven Pallavaraya rulers, the last of whom is *Seventhelunda Pallavarayar*.

The Pallavarayars were, apparently, worshippers of Siva, the last-named among them having granted the village of Sendamangalam rent-free to brahmins. While the Pallavarayars are referred to in a series of inscriptions covering a span commencing with the one regarding Lankapura and extending to the seventeenth century, their rule was by no means free from disturbances, internal or external. Maravar and Kallar intransigence added to the insecurity caused by the decline in Chola hegemony, while internal dissensions among the Vellalas increased.

It was in this rather fluid phase that Malik Kafur over ran the territory in his invasion of about 1310 A. D. The invader is presumed to have marched on Madurai from Kannanur near Srirangam, through Kodumbalur and Ponamaravati. An inscription at the Bhumisvara temple at Rangiam in Tirumayam taluk refers to the rule of a Muslim at Kodumbalur about the year 1331 A. D. This inscription also registered a grant of padikaval rights by the residents of Adanur to those of Rasimangalam "for giving them protection during the Muhammadan invasion." Another inscription from Adanur state that "the invasions of the Muhammadans made life insecure." These raids of Malik Kafur, the favourite slave-warrior of Alauddin Khilji, were aimed not at conquest

¹ Manuscripts of *Seventhelunda Pallavan Pillaitamil* and *Seventhelunda Pallavan Ula* were lent by the Tamil scholar U. V. Swaminatha Iyer to S. Radhakrishna Aiyar, author of *A General History of the Pudukkottai State*.

but plunder. The South was drained of a vast amount of wealth : six hundred and twelve elephants, ninety-six thousand *maun* of gold, several boxes of jewels and pearls, and twenty thousand horses, according to Barni.

'Troubles come not as single spies, but in battalions'. To add to the turmoil caused the invading forces from the north, Nature was not in a particularly beneficent mood at this time, either. An inscription at the Perumal temple in Ponamaravathi dated 1453 records that "..... the treasurers of the temple of Perumal Alagapperumal Vinnavar Emberuman appointed to the temple service one Mallayi, her daughter, and men who came to the village after much sufferance during the famine in the previous *Mala Prama-duta* and *Prajapati* years.....".

Another inscription, at Melur, dated 1455 registers ".....a sale of the *padikaval* rights by auction in the village by the residents of Melur to the inhabitants of Rasimangalam, as they suffered much in the famine caused by the failure of rain."

The Irukkuvel name disappears from this point. Consequent upon the general shake-up caused by the sudden Kafur invasion and its equally unceremonious withdrawal, Pudukkottai became a no-man's land which owed no allegiance to any single central authority. Contemporary inscriptions speak of the emergence of several new chieftaincies scattered all over the tract like the fragments of a broken glass pane. Mavali Vanadirayar (1468 A.D.) had his seat at Ponamaravathi, his son exercising sway in the region further south-west. Another Vellala line of rulers of influence was that of Gangayam at Niyamam near the modern Karaikudi. At Surai-kudi (twenty miles south of Pudukkottai town) and Arantangi reigned the Tevans and Tondaiman respectively. About twenty inscriptions relating to the Tevans have been discovered. They range from 1378 A. D. to 1608 A.D. The Tondaimans of Arantangi are heard of for the first time in 1426 A.D. and for the last, in 1569 making themselves masters first of the Palaiyur area ten miles to the east of Pudukkottai town and then annexing portions to the south-west.

The Rise of Vijayanagar :—

About the time of Malik Kafur's invasion a development of great importance was beginning to take place on the southern bank of the Tungabhatra at Anegondi : the founding of Vijayanagar. Two brothers Harihara and Bukka who, while in the employ of the Kakatiya ruler of Warangal, had seen their king overthrown by Ulugh Khan, the General of Sultan ghaiyas-ud-din, and had later been themselves carried prisoner to Delhi, were now back. Determined to throw off the Muslim yoke, they were soon in control over "the whole country between the eastern and western oceans"¹ K. K. Pillay observes : ² "Rising in A. D. 1335 on the banks of the Tungabhadra as a bulwark against the growing tide of Muslim power in South India, Vijayanagar steadily strengthened its position and carved out an empire for itself."

By the time of Krishnadeva Raya, the greatest of the Vijayanagar dynasty, an area substantially the same as comprised in the former Madras Presidency, was in the Vijayanagar empire and included, of course, the Pudukkottai tract. Like the Cholas and Pandyas before them, the Vijayanagar kings did not rule directly, giving a wide commission to their Governors such as the Nayaks of Madurai and Tanjore. Visvanatha Nayak who had been sent out to help the Pandya ruler Viithal Raja against the Cholas, set up his own rule instead of handing over power to the enfeebled Pandyas. It was in the time of Visvanatha Nayak, assisted by his Prime Minister Aryanatha (a man born of Vellala peasant parents), that the Madurai country came to be apportioned among 72 chieftains. Some of these chieftains were local men and some had accompanied Visvanatha Nayak from Vijayanagar. They were³ according to Radhakrishna Aiyar, "placed in charge of the 72 bastions of the new Madurai fortifications, were responsible for the immediate control of their estates, paid a fixed tribute to the Nayaka and kept up a certain quota of troops ready for immediate service."

The Nayaks at Madurai and Tanjore themselves became, in time, practically hereditary independent monarchies. After Krishna deva Raya's death in 1529 the great Hindu empire entered the doldrums. Babar had just inaugurated the Mughal dynasty in Delhi

1. This is a pardonable exaggeration for the area in the south which never could be amalgamated with the successive Muslim empires of Delhi.

². *South India and Ceylon* by K. K. Pillay, University of Madras, 1963.

³. *A General History of the Pudukkottai State*. p.91.

(1526). The Muslim rulers of Ahmednagar, Bijapur and Golconda engaged Vijayanagar in incessant contention. Vijayanagar reached its nadir in the battle of Talikota in 1565 when complete defeat and ruin was wrought on the dynasty and its capital city. Recovery was well-nigh impossible thereafter. The Nayaks were no longer dependable being engaged in battles with each other, and in the disciplining of their *palayakars* who had become tyrannical and recalcitrant. When Sriranga III ascended the Vijayanagar throne in 1642, the Sultan of Golconda was making preparations to attack Vijayanagar. The Nayaks denied Sriranga help and the ruler had, as a result, to establish his court in a forest to the north of Tanjore where according to Sathianathier,¹ "he spent four months, a prey to all discomforts ; his countries soon abandoned him, and this grand monarch, one of the richest in India, was forced to beg for help from the king of Mysore, once the vassal of his crown." The Muslim army made a sudden attack on Tanjore in March 1659 and seized it. This was followed by the capture of Mannargudi and Vallam.² "The Nayak of Tanjore thereupon decided to flee with some men, taking with him as much treasure from the coffers as he could. "Their strength was not in proportion to their greed", says Sathianathier, and "they were obliged to abandon a part of their riches on the way and soon found themselves entirely relieved by the kallars who robbed them." The kallars divided the treasures among a crowd of indigent families, thus saving "the fruits of the avarice of kings and of the labour of the poor"³ from falling into the hands of the Muslim invaders. They even showed an unexpected bit of generosity when, seeing the Nayak in misery, they restored to him a part of his riches. Such was the climate in the tract ; a centre, Vijayanagar, that did not hold, Nayaks who lacked courage but not avarice ; and an atmosphere where violence and banditry appeared at every turn. "The (Vijayanagar) empire was in theory", writes⁴ Nilakanta Sastri, "a hereditary monarchy ; but the times were hard, and the hostility of the Muslim States on the one side and the intransigence of feudatories on the other made it imperative that the king should be possessed of high attainments

¹ *Tamil takam in the 17th Century* (1956)

² Both these places are now in Thanjavur district

³ R. Sathianathier in *Tamilakam in the 17th century*.

⁴ *A History of South India* (1955).

in diplomacy and war." This is what, unfortunately, Vijayanagar in its later years lacked. A series of weak kings in constant fear of being dethroned by ambitious ministers or vanquished by Muslim power presided over the destinies of what had once been a Hindu war-state *par excellence*.

An Adventitious Circumstance and the Emergence of the Tondaiman.—At this time, Sriranga, "Suzerain of Gingee, Tanjore and Madurai" (more in title than in fact) passed through the Pudukkottai tract probably on his way to Rameswaram.¹ An adventitious occurrence took place on this occasion which was to be of great significance to the history of Pudukkottai.

An elephant in Sriranga Raya's retinue went berserk and a Kallar (who else would have dared?) was asked to subdue the animal. The Kallar was Avadai Tondaiman, son of Pacchai Tondaiman of Karambakkudi, one of the earliest kallars settlements in the area. The incident marks a startling social graduation for the Kallars of the region. Avadai Tondaiman was granted for this exploit an elephant with howdah ; an elephant with a kettledrum ; a lion-faced palanquin ; a large drum ; the privilege of having carried before him in procession the figure of a 'gandabherunda' the fabled bird said to prey on elephants ; the right to use torches in the day-time, a couple of birds to go in front of his palanquin singing his praise ; the right to use a lion-flag, a fish-flag and one with hanuman on it ; horses, umbrellas ; some lands ; and the title of Raya Rahutta Raya Vajridu Raya Mannidu Raya. A greater package of aristocratic styles can hardly be imagined. An elephant-catcher by heredity and training now donned the robes of a prince. Successful and distinguished watchmen and fighters, the kallars had been. But their emergence as local aristocrats dates from this subjugation of Sriranga Raya's pachyderm.

The elephant-tamer disappears from history after this incident. His children, however, continue to figure in the events following the episode. According to the *Tondaiman Vamsavali* (believed to have been written by the court-poet Venkanna in c.1750 A.D. and

¹ From the Telugu work *Tondaiman Vamsavali* by Venkayya and two Tamil poems *Raya Tondaiman Anuragamalai* and *Raya Tondaiman Iruttainimalai* quoted by S. Radhakrishna Aiyar in *A General History of the Pudukkottai State* 1916.)

collected by Col. Mackenzie about 1800 A.D.), Avadai Tondaiman had four sons, Raghunatha, Namana, Pacchai and Perama. He is also believed to have had a daughter, named Kathali. The first of these, Raghunatha, succeeded to the estates near Pila-viduthi obtained by his father, and acquired the title Raghunatha Raya Tondaiman. He entered service under the Nayak ruler of Tanjore, where he rose to a high place and was gifted a large State sword named 'Periya Rama Baanam'. After the close of Nayak rule in Tanjore (about 1674), Raghunatha entered the service of the Nayak ruler at Tiruchirappalli and acquired, through him, territories described as the twelve districts of the Tannarasunadu, lying "to the east of Tiruchirappalli, south of Tanjore and north of Ramnad"¹. Ramnad, thereafter, provided a significant addition to his territory.

According to *A General History of the Pudukkottai State*, the Setupati of Ramnad invited Raghunatha and his brother Namana to join military service under him in order to subdue a number of Tevans (minor chieftains) who had been causing the Setupatis a lot of trouble. Raghunatha and Namana, true to the example of their father, endeared themselves to the Setupati by several exploits which included the dextrous subjugation of more elephants. The Setupati is also believed to have married their sister, Kathali, who being exceptionally attached to her husband, committed sati on his death in 1710. The Setupati also granted to Raghunatha Raya Tondaiman the palayam of his fief, the Pallavarayar, which lay to the south of the Vellaru. The pallavarayar who naturally resisted the move, was killed in action that has all the colours of a Shakespearian tragedy. The Setupati being keen on giving Raghunatha a gift of land, a kallar general under the Setupati, Ilandari Muthu-Vijaya Ambalakaran, suggested that the palayam of the Pallavarayar be given. This idea was evidently inspired by the fact that the Pallavarayar (also a kallar) was showing signs of becoming independent from the Setupati. Seventhelunda Pallavarayar was summoned to meet the Setupati at Kalayarkovil. As it happened, the Pallavarayar was then in puja and it was reported to the Setupati that the Pallavarayar would see him on completion of the ceremony

¹Oppert's *Bharatavarsha*.

The Setupati with great *hubris* sent a force under his son on elephant-back to march to where the Pallavarayar was and kill him. The prince met him at a pond at Kandadevi, four miles from Kalayarkovil, and slew him. The Pallavarayar died with the curse on his lips that the Setupatis would, sooner or later, lose all their sovereign rights. The incident's Shakespearian atmosphere is completed by a sequel in which two loyal servants of the Pallavarayar speared the Setupati's son to death atop his elephant, and the Pallavarayar's wives and children committed suicide in a dramatic gesture in front of their palace. Ilandari Ambalakaran thereafter installed Raghunatha as the successor and ruler of the Pallavarayar's dominations¹. This was in 1686. Raghunatha is believed at this point to have built a circuit wall, 2½ miles long, at the site of the old towns of Kalasamangalam and Singamangalam, giving the new fortification the name Pudukkottai meaning 'new fort'.

Thus it was that the region south of the Vellaru comprised in the former Pudukkottai State and now in Pudukkottai district (excepting Arantangi) came under Tondaiman rule. Raghunatha gave Ilandari a jagir, making him a trusted ally thereafter.

Pudukkottai in the Eighteenth Century.—Even as Raghunatha acquired landed power by services rendered to the Nayaks of Tanjore and Tiruchirappalli and the Setupati of Ramnad, his brother Namana got gifts of land and honours similar to those bestowed on his father by Sriranga Raya, from the Nayak ruler Madurai, for helping him to subdue some recalcitrant palayakars such as the palayakar of Nagalapuram. The territories acquired by Namana-Tondaiman were lands comprised in the modern Kulattur taluk. By similar exploits, Namana also acquired the territories of the chieftain of Perambur and Kattalur (by 1707) which included many villages between Tiruchirappalli and Madurai such as Avur, as well as the tracts around Viramala and Ammankurichi from the territories of the chieftain of Kumaravadi.

By the first decade of the eighteenth century, much of the old kanadu, was, thus, under Raghunatha Tondaiman and Konadu under Namana Tondaiman. These two kallars by a combination

¹ This account is based on a petition presented to the Raja of Pudukkotti by a descendant of Kandan Ambalakaran quoted in *A General History of the Pudukkotta State* and Nelson's *Madura Country*.

of muscle-power and stratagem, had deprived the chief ruling houses of large chunks of territory and stood beside them as equals. The Vellala population of the area, after centuries of self-rule under the Irukkuvels and then Vijayanagar rule passed under the superintendence of a class that was, in every respect, less privileged than them. Resourcefulness had prevailed over birth.

The village syndrome, however, moved on the same lines. *Brahmadeya* grants continued to mark royal exercises in landed power. Raghunatha granted in 1718, the village of Kadayakkudi to Vaishnava Brahmins rent-free. Grants were also made by him to "a Srirangam Ayyangar" in Tiruppur village. The village Poram was granted to brahmins in 1728.

Christian Missions.—A significant sociological development of the times was the advent of Christianity in Pudukkottai. In the very year that Raghunatha Raya Tondaiman was installed, (1686), the Madura Mission chose Avur in the Kulattur tract as the headquarters of a new Catholic settlement.¹ The site had earlier been granted to the Mission by the chiefs of Perambur and Kattalur when Avur was under them. These chiefs were evidently very sympathetic to the Christian religion. With the village coming under Raghunatha, a question mark hung over the fate of missionary activities in the region. Raghunatha, however, soon dispelled it, assuring the Mission that he "had a singular affection for the Missionaries".² The church at Avur has survived several swings in its fortune and an impressive chapel at the site of the old one, reminds one of Avur's historic role in the spread of Christianity in South India.

That the 'founder of the Pudukkottai State' was a man of courage and outstanding physical stamina is clear. That he was also a man of considerable fair-mindedness is established by his handling of an incident involving the church of Avur. A Hindu temple was to be set up in Avur. The neophytes attached to the Church refused to pay a subscription they were asked to and, in the resultant misunderstanding between the two groups, one of catechists at Avur was accused of having mutilated the image of the deity that

1. See under 'Avur' in Chapter XIX.

2. Bertrand's *Mission du Madras*, Vol. IV, P. 209.

was to have been installed in the temple. Raghunatha, a Hindu, conducted a personal enquiry into the charge and finding the charge baseless, declared the accused Christian innocent.

Famine.—Raghunatha's tenure was marked not only by wars, conquests, and annexations which are the unavoidable birthpangs of a kingdom, but also by the wrath of nature. 1709 was a year of famine which led to migration, the sale and slavery of human beings, hunger and death. The church of Avur, which sent out its missionaries Fathers Bertholdi and Veyra, on journeys of ministration, noted¹ that "not one-thirtieth of the population survived the famine". When Raghunatha died, in 1730, Pudukkottai was a sizable territory, comprised of (i) Pilaviduthi, (ii) the lands immediately to the south of the Vellaru, (iii) the tract between Adanakkottai and the Vellaru, (iv) the area between about Alangudi and Kudimiyamalal, (v) the lands around Kulattur, (vi) the territories in Perambur-Kattalur, (vii) Viralimalai and Ammaakurichi, (viii) the whole of the present Tirumayam taluk except Kilanilai - a territory measuring, roughly, to three-fifths of the present Pudukkottai district.

The invasion of Chander Sahib.—While Raghunatha Raya was the creator of the Pudukkottai State, his successor and grandson, Vijaya Raghunatha Raya Tondaiman, was its consolidator. By the time the latter came to power (1730), the Grand Mughal, Aurangzeb, had died, leaving his empire to a succession of weak rulers. The Mughal's direct representative in the South, the Nizam of Hyderabad, and his vassal, the Nawab of Arcot, turned their covetous gaze to the deep south during the tenure of Vijaya Raghunatha Raya. Chanda Sahib, nephew of the Nawab, led the most destructive forces through Tanjore, Tiruchirappalli, Madurai and, of course, the Tondaimans' country. In the many-pronged warfare that shook the ruling houses of Madurai, Tiruchirappalli and Tanjore, the ruler of Pudukkottai suffered a heavy though temporary loss of territories. Ananda Rao, Prime Minister of Tanjore, led a large force to the Tondaiman country in July 1733 so as to annex Pudukkottai to the kingdom of Tanjore in the general confusion caused by the Muslim invasions of the southern kingdoms. Ananda Rao was able to occupy the whole of the Tondaiman's territories except the fortress of Tirumayam where the the Tondaiman hid himself along with the trusty

¹ Letter of the Madura Mission to Rome for 1709.

Ilandari Ambalakaran. Local maravars came to the beleaguered Tondaiman's help both by entering the fortress, thereby raising the morale of the Tondaiman's force, and by intercepting the convoys of provisions to the Tanjore forces. On account of this as also the withdrawal of support from Madurai that he had been receiving, Ananda Rao had to lift his siege of Tirumayam and withdraw, leaving the Tondaiman free to return to Pudukkottai, in October 1734, after an absence of fifteen months.

Establishment of Tondaiman-English ties.—The famous war of succession to the office of Nawab of Carnatic between Anwar-ud-din and his son Muhammad Ali on one side and Chanda Sahib on the other became, in due course, a war between the recently arrived English and French East India Companies, for the supremacy of the south. The scales in this war were, to start with, very much tilted in favour of the French, who had decided to support Chanda Sahib. The English, naturally, were on the side of Muhammad Ali. Chanda Sahib's troops outnumbered those of his rival by ten to one and the English battalion did not exceed 600 men, whereas the French soldiers numbered 900, when engagements took place at Arcot and Tiruchirappalli. The Tondaiman was firmly on the side of the English at this time, while Tanjore, Mysore and the Marattas wavered¹. This loyalty to the English, and the causes espoused by the English, was rewarded by the non-levy of tribute by the victorious Nawab.

Lest the significance of the waiver go unappreciated Radhakrishna Aiyar says in *A General History of the Pudukkottai State* : "No tributary State paid its tribute regularly in the eighteenth century. . . . So every one of the provinces had, as it were, to be invaded by the forces of Nawab and the English, and when, after the last pie that could be got had been extorted it was found that huge balances remained, the Nawab found it necessary to attack or annex the whole or portions of the provinces. . . Nothing like this happened in the case of Pudukkottai. Exemptions of the Tondaiman from tribute really meant the non-arrival of forces in these parts for the

1. The Tondaiman's first official connection with the British Government appears to have been formed sometime prior to the siege of Tiruchirappalli in 1752 as a Persian letter from Thomas Saundness, then Governor of Madras, dated "6th Shawal 1165 Hizree", exhorts the Tondaiman to avert in conjunction with the Raja of Tanjore, the Maratta Mysorean design on the Fort.

collection of arrears of tribute, non-committal of ravages by the sepoy during the so-called collection of tribute, non-annexation of the whole or any portion of the Tondaimans' country.

The Visitation of Haidar Ali.—The Tondaiman stood steadfastly by the English in all their subsequent wars with the French at Madurai, Tirunelveli, Tiruchirappalli and Madras, and against the onrush of Haidar Ali in 1769. Haidar of Mysore, who had thrown off the hegemony of the Nawab, descended upon the English possessions in the Carnatic. Despite repeated requests made to the Raja of Tanjore by the English and the Nawab they did not receive as much as a single man from that quarter. But the Tondaiman sent out a force at once to help the English. The then Governor, Charles Bouchier, wrote in a letter to Vijaya Raghunatha Raya Tondaiman. "These have been taken as acts of friendship". Haidar ravaged the Tondaiman's country, angered, no doubt, by the help given by the Tondaiman to the English¹. His tradition of 'acts of friendship' was continued by Vijaya Raghunatha Raya Tondaiman's son, Raya Raghunatha Tondaiman, who succeeded his father on the latter's death in 1769. Another Haidar visitation recurred in the region in 1781; more fierce than the first. Charles Stewart's *Memoirs of Haidar Ali* records that Haidar's irregular cavalry "collected the cattle and sheep and burned and destroyed the villages and crops on the ground; the banks of the ponds or reservoirs were also broken down or cut through, and the wells filled with the putrid bodies of murdered fugitives". Haidar's forces attempted to enter the Tondaiman's territories in 1781 but were decisively turned back by Raya Raghunatha's forces,² who helped the English at several places against Haidar and his famous son Tipu Sultan who became, in English eyes, "an ogre more hateful even than Bonaparte"³.

This Tondaiman's nephew and successor, Vijaya Raghunatha Tondaiman, was only thirty years of age, when he became the ruler in 1789. The very next year, Tipu made for Tiruchirappalli at the head of a large army that carried off as much grain as it could set its hands on and laid the province waste. The Tondaiman promptly despatched 1,500 men to the Tiruchirappalli fort, a gesture which must have played a part in forcing Tipu's retreat from the arena.

¹. See under 'Flora' in Chapter I.

². See under 'Adhanakkottai' in Chapter XIX.

³. Philips Woodruff in *The Men Who Ruled India*, Vol. 1 (19)

Muhammad Ali, the Nawab of Arcot, before he died in October 1795 conferred upon the Tondaiman the title of 'Raja Bahadur.' After Sriranga's conferment of the title 'Raya' on Avadai Tondaiman, this was the first title to be conferred. That the first one was conferred by a Vijayanagar prince and the second one, a century later, by the Nawab of Arcot, shows the resilience of the Pudukkottai State and the astuteness and courage of its ruling house. The Setupati, pre-eminent and patronizing once, was in Raya Raghunatha's time deposed and Ramanathapuram was reduced to the position of a Zamindari. The Nayaks of Madurai and Tiruchirappalli and the Rajas of Tanjore were being proved weak and unreliable in turn. But Pudukkottai was on firm ground.

The Poligar War.—It was in Raya Raghunatha's time that the first 'Poligar War' took place, between the English and the truculent *palayakars* of Tirunelveli, the most significant of whom was Veirapandia Kattabomman or Kattabomma Nayakar *alias* Karuthia, the palayakar of Panchalamkuricchi, then about thirty years of age. Kattabomman had two brothers Kumarasamy Nayakar, Subba Nayakar, aged 26 and 17. All the three brothers were "brave and intelligent"¹. Kattabomman, who had ventured to collect revenue on his own account in 'Sircar' villages, provoked the wrath of the East India Company which summoned him for determining the boundaries of some zamin villages then in dispute. Kattabomman ignored the summons and, joined by the palayakars of Nagalapuram, Elairampannai, Golavarpatti, Kulattur and Kadalgudi, decided to resist the Company's troops. Jackson then Collector of the Southern Peshcush and Ramnad, commanded Kattabomman to appear at Ramanad, which Kattabomman did, on the 9th of September, 1798. In a *melee* that ensued while the correspondence that had passed between him and Jackson was being read out, a Lieutenant Clarke, who was on guard, got killed and Kattabomman left the scene abruptly, accompanied by his followers. Kattabomman was, thereafter, pursued relentlessly by the Company's troops as also by those of the palayakar of Ettaiyapuram. On the besieging of the Panchalamkurichi fort, Kattabomman evacuated it, escaping first to Sivaganga and thence to th

¹. According to the author of *Ettayapuram, Past and Present* quoted by S. Radhakrishna Aiyar in *A General History of the Pudukkottai State*.

woods in the Tondaiman's country. Collector Lushington on the 8th of September, 1799, wrote to Raya Raghunatha Tondaiman to exert himself to locate Kattabomman. On the 14th of September, 1799, the Tondaiman wrote in reply to Lushington that he had despatched different parties to the boundaries of the country and assured the Collector that "if the Poligars approached his limits his attachment and fidelity to the Company would be made known to them".

The woods of the Tondaiman's country were deep enough to afford a sanctuary to Kattabomman. But they were familiar enough to the Tondaiman's forces. The Tondaiman was able to write to Lushington on the 24th of September: 1799, "I before despatched a letter to you intimating that I had stationed guards in different places to seize Cataboma Naig, & Co., on every occasion. I am ready with my life to serve the Company, their service is the essence of my existence. On every side in the mountains and on the hills, I had placed people to find out the hiding place of that enemy Cataboma Naig; by the blessing of GOD, the prosperity of the Company, and my own good fortune, he with his dumb brother, two brothers-in-law and three other people, altogether seven persons having been discovered in the jungle of the village of Kaliapoor, in the Shevagunga Talook, which jungle is to the Westward of Tiracullumpoor in my country, I last night sent my troops thither and after having surrounded him, with much caution and exertion the whole party were taken. Cataboma Naig at the time he was seized wished to have slain himself, but my people having bound his hands kept him in confinement; the particulars of this Poligar are well known to you, to keep him in safety one day is extremely difficult. He is without hope of his life. Whatever may be written by you shall be executed. I am waiting for an answer. May your friendship for me increase." Lushington replied saying the news had given him "joy beyond expression either through letter or by mouth" and asked the Tondaiman to hand

¹. The letter quoted above is a translation authenticated by Lushington, from the original in Persian, published along with other letters in 1874 at the Sri Brihadamba Press, Pudukkottai, under the long title : *Translations, Copies and Extracts of The Several Letters In Which The Services of The Ancestors of His Excellency the Maha Rajah of Pooducottah Are Particularly Acknowledged And Approved By The Governors And Other Public Officers of The Honorable E.I. Company and the Nawab of The Carnatic.*

over the prisoners to Captain Smith, commanding the Companies forces at Madurai. This was done. Kattabomman was soon taken back to Tirunelveli, and at Kaittar in that district, on the 17th October, 1799, was hanged in the presence of the palay akars of Tirunelveli assembled for the purpose.

Hemingway has described ¹ the Tondaiman—British connection during these decades in the following words ; “As early as 1752 the Tondaiman had declared for the Nawab and continued to assist him and the English not only in their wars with Chanda Sahib and the French, but also in their later struggles against Mysore, Tanjore, the Maravans and the poligars of Madura and Tinnevely. There are now in the palace at Pudukkottai over fifty letters from the Government of Madras and ‘the Sirdars of the Company’ (including Stringer Lawrence, Clive and Eyre Coote) in which repeated testimony is borne to the unshaken and unselfish zeal, promptitude and fidelity with which the Tondaiman, in prosperity and adversity, served the British Government. His loyalty was perhaps of the greatest service during the various sieges of Trichinopoly. The supplies he sent to the beleaguered garrison were of the greatest value ; but he paid for his devotion by having his country ravaged (May 1754) by the French. It would be tedious to give a list of the occasions when the Tondaiman gave active assistance to the British. They extended over some 50 years ; and on no occasion was Pudukkottai backward in rendering help, not even when (in 1759–60) Madras itself was in danger. On that occasion 500 Pudukkottai horse and 1,500 foot assisted the besieged.”

The Kattabomman episode is part of the pattern. The defiant valour of the Palayakar of Panchalamkurichi has come to be better appreciated with the passage of years. The revolt of the Tirunelveli Palayakars organized and led by Kattabomman had, despite the local and ephemeral nature of its immediate causes, all the makings of a mutiny. It presaged, in a sense, the great ‘Mutiny’ of 1857 which shook the Company’s administration in the North to its foundations. Lushington’s unconcealed gratification at Kattabomman’s capture testifies to this. Historical judgments have a tendency to change. While Kattabomman has risen in

¹ *Gazetteer of Trichinopoly* (1907).

general estimation as a hero, the image of the Tondaiman as reflected in the events of the time, has suffered a fall. His capturing and handing-over Kattabomman to the English has come to be regarded as an unpatriotic act. Seen, however, in the context of the Tondaiman's consistent fidelity to the English "in prosperity and adversity", the Tondaiman's role may objectively be summed-up as the reflex action of an ally. It brings to mind lines from the anonymous song¹ *The Vicar of Bray* :

"In good King Charles's golden days,
When loyalty no harm meant ;
A furious High-Churchman I was,
And so I gained preferment."

The Tondaiman's loyalty to the English had been compacted when loyalty no harm meant, nor, it might be added, the promise of gain. Their alliance was just there—a fact. It manifested itself on several occasions, Kattabomman's being one of them. It caused the Tondaiman grievous harm at the hands of the enemies of the English and, at times, preferment. One of the significant instances of the latter effect was the grant in 1803 to Vijaya Raghunatha Tondaiman of the Kilanilai tract in the Tanjore country over which the Company had then acquired control.

Elephants keep coming in and out of the Tondaimans' lives. We find among the honours² received by this Tondaiman from the Company and the Nawab, the following :—

(1) For the installation, an elephant, a horse, a khillat (a ceremonial dress) and a sword.

(2) In 1791-92, an elephant and a khillat.

(3) In 1796, naubat,³ a bundle of peacock feathers, the title of Raja Bahadur, a flag, a khillat, and an elephant.

(4) In 1797-98, an urumal, "a scarf for the head or the neck, being a portion of a full khillat⁴ of seven pieces".

¹. *Penguin Dictionary of Quotations* (1960); 7 : 17.

². Listed in *A General History of the Pudukkottai State*.

³. The naubat was a large kettledrum used in Mughal India.

⁴. This was called malbus-i-khas or royal robes. "As a special mark of honour the robes might consist of clothes that the Emperor had actually worn". A seven-piece khillat, which was the most honourable robe of distinction, consisted of (a) a cap, (b) a long gown, (c) a close-fitting coat, (d) two pairs of trousers, (e) two shirts, two girdles, (g) a scarf for the head or neck. ig.

(5) In October 1797, "a khillat of the pattern worn by the Nawab" on the occasion of the birth of a son to the Raja.

(6) In 1798-99, an elephant, a padakkam (or pendant of precious stones), bracelets (கேதாடா) and armlets (பாசுபந்து).

(7) In 1800-1801 a bundle of the feathers of (உமாபட்சு) (or the bird of Paradise) and a horse.

(8) In June 1800, an elephant and a chain.

(9) For capturing Kattabomman, a horse and a khillat.

(10) In 1801-1802, guns, 300 bullets and ammunition.

(11) In 1803, Kilanilai district and two gold sticks.

What was the socio-economic setting in which these political events took place? Despite 'the rush of horses and the waving of flags', the Tondaiman's country in the eighteenth and the nineteenth centuries sustained agricultural activities at an even rhythm.

Pudukkottai in the Nineteenth Century.—A statistical account prepared on cadjan leaves in 1813 by the Pudukkottai State under instructions from the East India Company speaks of the Tondaiman's country as being divided into five 'taluks', each of which having rivers and channels coursing through their agricultural fields and tanks feeding them, as follows :

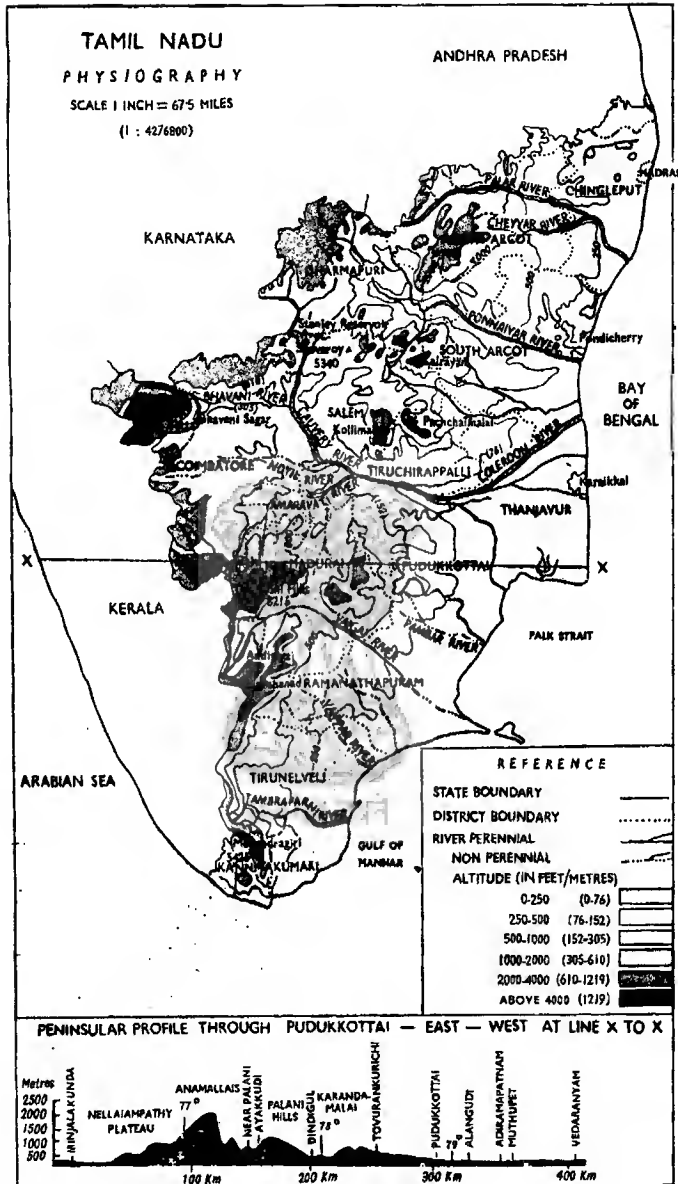
<i>Taluk.</i>		<i>Rivers.</i>	<i>Channels.</i>	<i>Tanks.</i>
(1)		(2)	(3)	(4)
1. Vadamukham ¹..	.. ..	2	10	680
2. Melmukham ..	.. ..	6	11	690
3. Kilmukham ..	.. ..	4	13	405
4. Thenmukham ..	.. ..	2	5	618
5. Kilanilai ..	.. ..	2,	5	157

1. Vadamukham taluk was the Northern most taluk (as the name indicates) covering the North-western portion of the present Kulattur taluk, bordering the Tanjore district. It extended upto Perambur in the west.

Melmukham taluk consisted of the rest of Kulattur taluk and northern part of the present Tirumayam taluk. Its southern border was Sevalur.

Kilmukham taluk covered the most of the present Alangudi taluk's northern half and the southern half was covered by Thenmukham taluk.

Kilanilai taluk was the southern part of the Tirumayam taluk bordering the present Arantangi taluk.



SOURCE:— Census of India 1961 Volume IX Madras, and Historical maps

The fields by 1813 had been subjected to a sophisticated system of land-fertility classification. The account lists soiltypes as *karisal*, *sevval*, *uvar*, *pottal*, *veppal*.¹ The East India Company had an established survey department by about this time, with a hierarchy of surveyors and assistant surveyors. Its work spread on to the Tondaiman's country where we find taluk, village and field boundaries marked out intricately.

Apart from the production of paddy and millets, the Pudukkottai taluks had a number of orchards. The 1813 account lists them thus :

<i>Name of Tree.</i>	<i>Vadamukham.</i>	<i>Mel-mukham.</i>	<i>Kil-mukham.</i>	<i>Then-mukham.</i>	<i>Kilainilai.</i>
(1)	(2)	(3)	(4)	(5)	(6)
1 Cocanut	9,204	27,642	18,871	15,418	1,740
2 Tamarind	3,031	4,329	6,962	426	532
3 Mango	710	637	7,150	635	341
4 Palm ..	2,716	6,337	438	1,894	17,980
5 Jack ..	62	178	11,923	438	144
6 Illuppai	337	771	144	1,040	490
7 Nelli ..	119	92	637	174	25
8 Orange	345	406	66	..	1,986
9 Silk cotton	62	110	226	147	61
10 Guava ..	4	15	64	26	20
11 Bamboo	31	44	7	..	10
12 Cashew	13	..	..	..	..
13 Jambu ..	329	7	..	..	3
14 Neem ..	6,041	57	..	..	7
15 Thetha	157	..	..	..	..
16 Punnai	2	4	..	..	..
17 Pannar	4	4	..	..	..
18 Areca Nut.	118	..	..	..	..
19 Pomae-granate.	6	..	..	..	60

The Tondaiman's country was well-served by roads. Vadamukham had 3 major roads, Melmukham 4, Kilmukham 6, Thenmukham 5, and Kilanilai 2.

It exported, in 1813, silk and cotton cloth to places such as Madurai, Tanjore and Kumbakonam. Its handloom production centres were, according to the 1813 account, divided thus :

	<i>Vadamukham.</i>	<i>Melmukham.</i>	<i>Kilmukham.</i>	<i>Thenmukham.</i>	<i>Kilanilai.</i>
(1)	(2)	(3)	(4)	(5)	(6)
1 Silk ..	3	..	..	30	..
2 Cotton ..	132	451	67	310	85
3 Wool ..	65	169	5	75	..
4 Grass ..	3	..	1	..	..

The statistical account of 1813 gives the following picture of housing in the Tondaiman's country :

	<i>Vadamukham.</i>	<i>Melmukham.</i>	<i>Kilmukham.</i>	<i>Thenmukham.</i>	<i>Kilanilai.</i>
(1)	(2)	(3)	(4)	(5)	(6)
1 Palaces ..	..	2	9	10	..
2 Terraced Houses.	..	..	..	6	..
3 Tiled Houses.	9	5	7	323	2
4 Thatched	6,452	9,245	4,947	8,757	1,753

Pudukkottai already abounded in votive temples and gopurams—the 'still-centres' of village life—in the eighteenth and nineteenth centuries. The 1813 account gives their distribution, thus :

	<i>Vadamukham.</i>	<i>Melmukham.</i>	<i>Kilmukham.</i>	<i>Thenmukham.</i>	<i>Kilanilai.</i>
(1)	(2)	(3)	(4)	(5)	(6)
1 Temples	116	196	174	58	9
2 Mandapams.	14	22	8	36	19
3 Gopurams.	6	41	2	23	..
Chhatrams.	3	2	10	11	..

Vijaya Raghunatha Tondaiman built a number of chattrams in his domain as also outside. Among these may be mentioned the chattram at Onangudi built by him in 1799 in the name of his wife Amma Ayi, and at Kulavaipatti and Mullur. He gave grants for chhatram at Gandharvakkottai and Tiruchirappalli. Brahmins continued to be at the receiving end of royal grants of land.¹ Radhakrishna Aiyar informs us : "Streets of houses were built at Rangammal Samudram in Perungulur Nadu (in 1793 A.D.), at Tirumalairayapuram (in 1794 A.D.), at Tirumalaraya-samudram, a little to the east of the town (in 1796 A.D.), at Sellukudi or Brihadambalpuram (in 1799 A.D.), at Kiranur or Mangalambalpuram (in 1804 A.D.), etc., and were presented along with rent-free lands to Brahmins. Houses in many other villages—two, three and more—were also built and presented to Brahmins with lands. In some cases, lands were measured out and assigned rent-free for Agraharams being built, as at Subbammalpuram near Valnad. Tracts of land in various parts of the State were assigned to Brahmins as Sarvamanyams or as rent-free lands, as at Kovilur or Ammaniammal samudram (in 1802 A.D.), Malaiyur or Ramachandrapuram (1803 A.D.), Kilappalinji near Tirugokarnam (1803 A.D.), Manianviduthi or Brihadambalpuram in Valnad tract (1804 A.D.), Pungudi or Raghunathasubrahmanya-samudram (1805 A.D.), at Navalkulam or Vijaya Ramachandrapuram in Ponnarviduthi tract. In most of the villages in which the Brahmins had settled, arrangements were made for Vedic instruction being given by the grant of Vedavritti lands to Vedic scholars employed as teachers, who by the Hindu Sastras are forbidden from receiving fees for imparting Vedic instruction. Among the Brahmins that were thus patronised, there must have been many that were well-read in the Vedas and Sastras, but we also find mention made in the Inam office records of lands granted specifically to learned Brahmins. As examples we may mention the "Srotriem lands" granted to Vedic scholars at Tulaiyanilai in Tirumayam taluk (in 1804 A.D.), at Menavayal near Senkarai (in 1805 A.D.), at Vaiyapuri Endal in Kulattur taluk (in 1806 A.D.), to "a Jatavallabhar" at Kurundanvayal in Perumanadu tract and to "a Balakavi" or "a young poet" at Vennavalkudi near Kulavaipatti."

¹ *General History of the Pudukkottai State.*

Vijaya Raghunatha Tondaiman died on the first of February, 1807. He left behind the rani, Ayi Amma Ayi, and their two sons, ten and nine years of age. The widow, inspite of all dissuasions, flung herself into the fire-pit after entrusting the boys to the care of Captain Blackburne, the British Resident at Tanjore. Amma Ayi clearly belongs to the select group of Hindu women who, holding self-immolation upon their husband's death as an act of nobility, met death not just voluntarily, but courageously and beatifically, on the pyre. The custom of *sati* was not as common in the south of India as it was in the north-east, Bengal being *sati* country *extraordinary*¹. There was no pressure on Amma Ayi. The promptings were her own. She believed, apparently, in what Ananda K. Coomaraswamy has called² "this last proof of the perfect unity of body and soul, this devotion beyond the grave". The *sati* occurred at Karatope, the traditional funeral ground of the Tondaiman family in the town. A temple has been raised over the site which is now called 'maalai idu' or the place of the garlands to signify the offering here of wreaths to Amma Ayi's memory—a practice that has continued through the decades.

The older of the two boys, Vijaya Raghunatha Raya, was installed as the Raja of Pudukkottai shortly after the death of his father and the self-immolation of his mother. He was ten years old at the time.

British Assumption of Administrative Powers.—During the life of Vijaya Raghunatha there was no exclusive channel of communication between the Raja and officers of the East India Company. Upon his death, the Madras Government asked Major William Blackburne, Resident of Tanjore, to "undertake the management of the province of Poodocottah and the guardianship of the minors." This was the first direct *entree* of a Briton in the internal life of Pudukkottai. Blackburne had entered the Madras Army as a cadet of infantry in 1782 and had played an active part in the "reduction" of the palayakars of Tirunelveli and the campaigns

1. *The Gazetteer of India* : Volume II (1973) says : "In Southern India, only Ganjam, Masulipatam and Thanjavur had fairly large Sati occurrences." (page 637)

2. In his celebrated work *Dance of Shiva* (1956) Coomaraswamy compares the motivation of the satis to that of the many women in the ill-fated liner *Titanic* who refused to be rescued without their husbands, "or were only torn from them by force" before the vessel sank.

against Tipu. An unusual proficiency as a linguist earned him the post of Marataa interpreter under the British Resident at Tanjore. In 1801, by which time he had become Captain Blackburne, he was appointed Resident at Tanjore. On being placed in charge of the "management" of Pudukkottai, Blackburne brought to Pudukkottai a good deal of the Tanjore administration's Maratta mystique.¹ Revenue and judicial administration of some method and complexity were now introduced in Pudukkottai. In a Report to the Madras Government, dated 31st December 1808, Blackburne said : "The principal production is dry grain, the proportion of which to paddy is as four to one. The whole of the dry grain is consumed in the country. Nearly the whole of the paddy is exported to the surrounding districts and to Ceylon. The cultivation of both the paddy and dry grain is capable of being much extended. An equitable and liberal system of revenue and the consciousness of protection to their persons and property will, it is hoped, encourage the cultivators to double the produce of the country in a couple of years more. The division of the produce was very irregular. All idea of a fixed rate appeared to be lost. With the exception of informers, no checks existed in the Revenue Department. No double set of accounts as in Tanjore and the Carnatic ; no Curnams ; no regular Cutcherries in the District with officers appointed by Government ; no regular duffer in the capital ; no office anywhere in which the accounts of the country were recorded. Tondaiman himself or a person temporarily and verbally authorised by him usually received the money which was transmitted from the districts by the Revenue Officers ; sometimes this person gave a receipt ; sometimes the Sirkeel, and not unfrequently no receipt was given. The Revenue Divisions of the country seldom continued the same two years together. As caprice or interest dictated, portions of land separated from one division were added to another. The administration of justice in Tondaiman's country was not less defective than that of Revenue, in succession to which I notice it, because the only regular officers of justice were the Revenue Officers. They held no regular courts, were not aided by Pundits or Shastries, kept no record of their decisions and did not report them to the Government. Injuries committed by men of influence or in power they never noticed

¹ See Chapter XI.

and they received no complaints against the great Jaghiredars who exercised without restraint a judicial authority over the lands in their possession."

Blackburne also took up the up-bringing of the young Raja and the younger prince. A strongly paternalistic vein is discernible in the correspondence left behind by Blackburne. In a letter¹ to the Raja, Blackburne wrote : "I wish you to inquire into and inform yourself what business has been transacted in the cutcherries ; but you must not as yet give any orders and above all give no recommendation in favour of any one. I wish that you would examine the accounts frequently and inquire daily what repairs have been made to the tanks, what advances have been made to the cultivators, and what plans of improvement have been projected or are in progress. Protect all your subjects from oppression and extortion. This is the most sacred duty of a king. Any violence committed against any one in your country is an injury to you. It is particularly your duty to protect all classes of persons in your country, but most particularly so to be careful that the persons and properties of the lowest ranks suffer no injury, the higher classes, generally speaking, being out of the reach of injury and the lower classes most exposed to it. See every thing, hear everything and suffer no injustice, oppression or idleness to enter into any part of your administration. No human consideration whatever should induce you and me to acquiesce in an injury to a poor man. This is your sacred duty in particular and as you fulfil it properly, the blessings of the great Judge of kings and cultivators be upon you."

Not surprisingly the boys began addressing him as 'father'. Blackburne retired in 1823. Vijaya Raghunatha Raya Tondaiman ruled from 1807 until his death in 1825. He was succeeded by his brother Raghunatha Tondaiman in that year. This ruler received in 1830 from the Governor of Madras the conferment of the title of 'His Excellency'. Raghunatha died in 1839 and was succeeded by his son and heir, Ramachandra Tondaiman. His long tenure of office (1839-1886) was marked by extravagance and gross mismanagement which continued until the arrival on the scene of an able administrative correctionist in the person of

¹. Quoted in *A General History of Pudukkottai State*, page 349.

A Sashlah Sastri. The mal administration of Ramachandra Tondaiman and his officials and the consequent evaporation of the cordality between the Pudukkottai State and the British Government were symbolized in the withdrawal in 1859 of the style of 'His Excellency' from the Tondaiman. That this had to be done despite the assurance given by Queen Victoria in her famous 1858 Proclamation¹ to respect the rights, dignity and honour of the native princes, shows the extent of the deterioration in Pudukkottai affairs under Ramachandra Tondaiman. In an order² dated 27th September 1874, the Government of Madras informed the Raja that "in the event of continued negligence and misconduct on his part, the Government will be compelled to reduce him to the position of an ordinary zamindar." This was the lowest point in Tondaiman-British relations.

Famine Agatn

1866 and 1868 were years of distress, the rains failing entirely and the tanks drying up. A significant amount of statistical detail is available for these two droughts. The *Manual of Pudukkottai State*, Volume I, 1938, tells us that "both *kalam* and *kodai* were failures and the result was a large-scale migration from the State of ryots, traders and weavers". The manuscript *Administration Report* for 1866, preserved in the record rooms of the office of the Revenue Divisional Officer, Pudukkottai, contains an account³ of the impact of a poor crop on land revenue receipts.

This was the first drought to take place in the Pudukkottai State after the Mutiny and the transfer of power to the Crown. The analysis in the *Report* of the budgetary implication of drought reveals sophisticated criteria of financial and administrative governance taking root.

1. The Queen's Proclamation confirmed the treaties of the East Indian Company with the Indian princes, and followed the historic Act for the Better Government of India whereby the Sovereign of Great Britain assumed the governance of India.

2. Tamil Nadu Archives Records, Madras.

3. "However", it says, "the uncommon rates of prices at which the kinds of grains were sold made good the loss to a great extent, leaving only a decrease of Rs. 11,599-0-6".

The firm hand of the British Raj, however, is seen unmistakably only in the next drought, that of the years 1876-78. One sees it in the Sirkele's¹ applying to the Political Agent H. Sewell, for funds for the renovation of wells and roads and scrub-clearing ; the Agent's arranging for funds that are accompanied by the prescription of a form of returns that watched utilisation ; Sewell's selection of the Tanjore and Madurai roads for relief work ;² his tours in the State and organising of public donations and subscriptions ; his arrangements for the purchase of paddy at Tanjore. The 1876-8 famine in Pudukkottai, and elsewhere in the South had all the trappings of the white-man's burden.

The famine struck Pudukkottai and the rest of the Presidency in 1876-78 alike. But in the arrival of 'relief' there was a difference. The British Government saw the famine through bi-focals that magnified the distress in 'British' India at the expense of Pudukkottai. The incidence in the State was, perhaps, less severe than in many parts of Presidency. But it none the less was considerable. We have the following description³ from Bhavanishenker Row, the Sirkele :

"Almost the entire failure of rain in the Fasli under report has subjected the people of this territory to hardships of various descriptions Great many lives have fallen victims to the ravages of epidemic diseases.....".

Government expenditure in the Presidency in 1876-78 was Rs. 6,24,50,000.⁴ Pudukkottai got no part of this. Again, out of private charities⁵ received from England, Pudukkottai received only a small allotment of Rs. 7,500.

The Famine Relief Fund was in British India, to supplement Government's efforts. But for Pudukkottai the sum of Rs. 7,500 represents all that it received.

¹ The term means, according to Wilson's *A Glossary of Judicial and Revenue Terms* (1855), "a minister, a chamberlain, a major domo". The word is, no doubt a derivation of the Marathi designation or title *Sarkkel* conferred by the Peshwa.

² This part of the 1876-8 relief was, perhaps, the most significant.

³ Darbar Records, Pudukkottai.

⁴ P. 300 of the *Manual of the Administration of the Madras Presidency*.

⁵ A sum of about £ 8,00,000 was received from England by the Madras Government, and formed the Famine Relief Fund, 1876-8.



Sir A Sashiah Sastri—Diwan and Diwan-Regent of Pudukkottai 1878—1904.

Courtesy : A. R. S. Sastri, Kumbakonam

For a famine in which "a great many lives" had, according to the Sirkele¹ been lost, the Government's allocation of an extremely small sum to Pudukkottai, (and that too from a subscribed Fund) appears strange.

Sir A. Sashiah Sastri.—The years 1879–80, 1884–85, 1889–90, 1893, 1895 and 1898 were also affected by droughts of varying intensity. The first four of these took place during the administration of Sashiah Sastri.

Sashiah Sastri did not belong to the Pudukkottai State. He had joined as an acting clerk in the office of the Board of Revenue in September, 1848, and had risen to the post of Head Sheristadar (the highest post to which a 'native' could rise under the Government in those days), in the course of 21 years. He was Head Sheristadar in the Board from the middle of 1869 to April 1872, when his services were placed at the disposal of the Maharaja of Travancore for appointment as Diwan. He became Diwan of Travancore on the 20th May, 1872, and held that post till August 1877, coming to Tiruchirappalli thereafter to settle for the time being. He stayed there for about one year. This was a time when the terrible famine of 1876–78 was at its peak. In the middle of September 1877, he was made Vice-President and Secretary to the Mansion House Famine Relief Committee at Tiruchirappalli. He was made a 'Companion of the Star of India' (C.S.I.) in January 1878 in recognition of his long and distinguished service. About the same time, he was appointed an additional member of the Legislative Council. Thus, when Sashiah Sastri was appointed Sirkele of Pudukkottai State, he brought with him a fund of administrative experience. He was not over enthusiastic about the Pudukkottai post. Sir Madhava Rao, then Diwan-Regent of Baroda, had suggested the appointment of Sashiah Sastri as Sirkele of Pudukkottai to the Raja and the Chief Secretary to the Government of Madras. Sastri was reluctant. The Raja had to entreat him to accept. He did so only on the condition that he would give no commitment regarding his period of service at Pudukkottai. Sashiah Sastri became Sirkele of the Pudukkottai State on 8th August 1878.

¹ The Sirkele also reported (Darbar Records, Pudukkottai) that by February 1877, 4,100 deaths of cattle had taken place for want of fodder and a further loss of 27,000 was expected if no rains came.

The state of administration in Pudukkottai was extremely bad in 1878. It had not recovered from the serious effects of the great famine 1876-78. The financial position was critical. The Government of Madras was constantly reminding the Raja of his duties towards his State. He had already been deprived of the honour of the royal salute and the title of 'His Highness'. The scope for reforms in all the branches of administration was, therefore, great. A man who could be trusted by the British Government, could not easily involve himself with local politics and vested interests. He could take the initiative in successfully implementing reformatory measures in judicial, revenue, and other important branches of administration. He could infuse integrity and honesty in to the State administration, and who could see that the British favour toward the State was restored, was the immediate need of Pudukkottai. Sashiah Sastri did all this.

The first task to receive Sastri's attention was the organization of famine relief. The pattern of relief operations was largely the same as that employed in 1876-78. Sastri's most significant contribution to drought-relief, however, is his work on the renovation of two tanks that supply water to Pudukkottai town: the Pallavankulam and the Pudukulam. The renovation of the former was taken up during the 1884-85 famine and is described graphically in the Manual of the Pudukkottai State, 1921. The repairs were carried out by means "truly oriental" involving the conscription of some 5,000 labourers from all over the Pudukkottai State—

"all the thousands of men worked in the boiling heat, with the Karbar¹ of the State and of the Jagire, the Tahsildar and other high officers personally whipping them on to exertion ; and a never-ending line of men and women carried the slush and the silt in relays ; and an ever-multiplying number of hand-picotahs and swing-baskets drained the tank of its liquid² contents".

As in the case of the Pallavankulam Sashiah Sastri also took up the renovation of the Pudukulam in Pudukkottai town during the drought of 1889, with the intention of enhancing the tank's capacity

¹The designation was changed subsequently to "Diawan-Peishkar. The duties of the post approximated those of a Collector.

²P. 433 of the 1921 *Manual*.

to hold 115 million gallons of rain water to supply the town with drinking water. The credit of initiating the Pudukulam water supply scheme goes to him. The work was designed by C.H. Wilks, M.I.C.E., then Civil Engineer of the Pudukkottai State. In 1889-90, the Pudukulam, which was the largest tank at Pudukkottai, went almost dry. The noxious affluvia from decaying vegetation within it became a source of anxiety. Sashiah Sastri utilised this opportunity to enlarge and improve this tank, incidentally making use of the abundant labour available. He projected to make it a magnificent reservoir, which could place the town beyond the reach of drought.¹

It was calculated that the tank would hold 115 million gallons of rain water collected on a water-shed which was all jungle and free from population and be able to give an ample supply of water not only to the eastern portion of the town but also the palace garden under it and to several new public buildings which it would command.²

The work took nearly four years to complete. It covered an area of 11,16,280 sq. feet at full supply level. Its capacity was 86 million gallons. It was first filled in 1894.³

The stamp of Sashiah Sastri's administrative genius can be seen in fields as diverse as the improvement of devasthanams and the extinction of prickly pear ; the strengthening of education in the State and the setting up of postal services ; the abolition of outmoded land tenures and the safeguarding of public health ; the reorganization of budgetary practices and town improvement. The Police, Courts, Public Works and a host of miscellaneous subjects of government received Sashiah Sastri's careful attention. His tenure is memorable also for the extensive use made by him of Tamil in official work.

It is true that in a few directions he did not achieve his aims before handing over charge on 24th November 1894, but this was due to reasons beyond his control. Beginnings had been made and the State had gained sufficient strength to improve gradually. The

^{1,2}Report on the Administration of Pudukkottai 1891-92.

³The report of Hormusji Nowroji on the Pudukkottai water Supply Scheme,

financial position of the Government had improved. The displeasure of the British Government had also been pacified. Assessing his own performance, Sashiah Sastri wrote¹ to the Political Agent in July 1894 :

“ The State was bankrupt and sinking both from the incorrigible extravagance of the late Rajah and from chronic mal administration, when I was called to rescue it. Not by any fluke or windfall, or stroke of good luck, but by dint of sheer hard-work, vigilance and perseverance and in spite of much opposition, the Revenue of the State has been more than doubled (*i.e.*,) from $3\frac{1}{2}$ lakhs to $7\frac{1}{2}$ lakhs and that for all time to come, and that the administration in every branch has been placed on a firm and efficient footing so much as to embolden me to challenge comparison with any other model Native State.

I entered office 8th August 1878.—

	RS.
Land Revenue then was	2,73,558
Separate Revenue was	69,083
Total ..	3,42,641
<hr/>	
In these 16 years Land Revenue has increased to ..	5,20,000
In these 16 years Separate Revenue has increased to ..	2,50,000
Total ..	7,70,000
<hr/>	

The revenues during the previous 16 years aggregated 54 lakhs. Expenditure nearly equalled it, but included 10 lakhs in payment of Raja's debts. During the whole of that period Palace Expenditure was 25 lakhs while the outlay on Public Works was only 4 lakhs. The revenues during *my* administration aggregated 94 lakhs. Expenditure amounted to 90 lakhs, of which Palace was 30 lakhs. Direct Demands on the Revenue and charges of collection 14 lakhs. Western Palace $2\frac{3}{4}$ lakhs, Military $1\frac{3}{4}$ lakhs, other Civil Departments, Courts, Police, etc., $18\frac{3}{4}$ lakhs and $22\frac{3}{4}$ lakhs ; on Public Works inclusive of Expenditure distributed thus : Irrigation Works 3 lakhs ; Roads 6 ; Public Buildings $8\frac{1}{2}$; Improvements and Sanitation of the

¹National Archives Records, New Delhi.

Capital 3½ lakhs ; Establishments 2. The increase of revenue was derived from under Land Revenue-change from Amani System to money assessment (Rs. 60,000)—Resulting extension of cultivation Rs. 50,000. Enfranchisement of Service and other Inam Tenancy Rs. 90,000—Resumption of Jaghir, etc., Rs. 50,000—Rs. 2,50,000.*

One development that must have pleased Sashiah Sastri greatly was the restoration of the salute of 11 guns and the title of His Highness to the Raja on the 22nd April 1884.

Ramachandra Tondaiman, after a colourful reign full of extravagance, intrigue, dishonour and, finally, rehabilitation, died on the 15th April 1886 at the age of 57. A few weeks before his death, Pudukkottai town had received its first gubernatorial visit. Sir Mountstuart Elphinstone Grant Duff, Governor of Madras, came to the capital of the State on the 2nd of February 1886, leaving it on the 4th. He has recorded in his *Notes of a Diary kept chiefly in South India in 1881-1886* : “... I was naturally received with much *empressement*. At the fireworks on the night of the 3rd, there may have been well on to 30,000 men. Everywhere (throughout the town) it rained wreaths and nautch girls.” In his official Review Minute of 1886, Grant Duff observed : “The last Raja of Pudukota fell at one time under the displeasure of the paramount power ; but I had the satisfaction long before his death of seeing the agreeable relations, which prevailed between this government and his family, completely restored. Pudukota has advanced considerably in recent years under the care of the experienced and able minister whom we have now nominated Regent for the grandson of the late Raja, who is still, a boy.”

Martanda Bhairava Tondaiman, grandson of Ramachandra Tondaiman, was ceremoniously installed in a ‘Pattabhishekham’ on May 2, 1886. Sashiah Sastri, Diwan hitherto, now became Diwan-Regent. His relationship with the young Raja was not, however, marked with the parent-child syndrome that was in operation in William Blackburne’s time. When a proposal was being considered to appoint a European tutor to the Raja, Sashiah Sastri wrote to Madras :

“As to the appointment of a European tutor, it was my first idea also. But on second thoughts, I considered it would be better to bring such a tutor in, when the young rajah was more advanced



Celebrations in Pudukkottai town to mark the Silver Jubilee of Martanda Bhairava Tondaiman's
succession to the Pudukkottai throne—1913.

Courtesy :- Thiru Rajagopala Tondaiman, former Raja of Pudukkottai

in years, say, 15 or 16 years old and more advanced in his studies. His late highness agreed with me. Moreover to speak candidly, I am not without misgivings about the effect of bringing a youth under the influence on a solitary European Gentleman, exiled as it were, from a public society or the public opinion of his own countrymen. The late two rajahs of Travancore were educated by Sir T. Madhava Row. The present rajah was also educated by a native graduate. In all these cases the results were satisfactory enough as Government know. But the present Eliah rajah, who was by way of experiment placed under a European tutor (Mr. Ferguson I believe) has turned out a character with very strange habits (with great partiality for wine and meat among other things) and with a contempt for everything, which the people of the State hold sacred. I may (I admit) be perfectly wrong in connecting two circumstances as cause and effect. But popular belief is such and I state it here for what it is worth."

Sastri's prognostications were proved right. Whether because of the influence of his European tutor¹ or due to his own aptitudes, Martanda acquired a marked preference for the western mode of life. On his reaching nineteen years of age, Martanda Bhairava assumed the full powers of a Raja of Pudukkottai. The then Governor of Madras, Lord Wenlock, came to Pudukkottai to attend a Darbar held for the purpose. Recalling the assistance rendered by the Tondaimans to the English in their several struggles in the South, Wenlock hoped that Martanda Bhairava Tondaiman would follow "in more peaceful paths" the example of his forbears and support British rule in India by a "wise and just Government of the State."

Sashiah Sastri retired on the occasion of the young Raja's assumption of powers. On the eve of Sashiah Sastri's retirement, James Andrew, the then Political Agent wrote to him :

"As the Regency will terminate tomorrow it is probable that I shall not have occasion to address you again as Diwan-Regent. I wish therefore to take this opportunity of expressing to you my sense of the valuable services which you have rendered to the State during a series of years—services of which I can form some idea from a personal knowledge of twelve months, but still more from a perusal

¹ F. F. Crossley a native from Cambridge University was appointed tutor graduate staff of assistants to teach the young Raja on variety of subjects.

of official records of past years—your public career, extending to almost half a century, is now about to close, and I wish that with renewed health in your well earned retirement you may live long to enjoy the pensions granted to you by their Highness, the Maharaja of Travancore and the raja of Pudukkottai for the good services which you have rendered to their States.”

Having never forgotten the welfare of the people of the Pudukkottai State during the sixteen years of his administration there, Sashiah Sastri has become, for Pudukkottai, unforgettable himself.

With the departure from the scene of Sashiah Sastri, and the assumption of power by a Raja who was very “twentieth century” in outlook and upbringing, an epoch ended—an epoch of darbars and khillats, of battles and elephants. An assessment of the position of the Tondaimans may be appropriate here.

There were five major States with which the Government of Madras was connected—Travancore, Cochin, Pudukkottai, Banganapalle and Sandur. The relations with Travancore and Cochin were governed by treaties, with Banganapalle and Sandur by sanads. Pudukkottai had nothing. No formal document gave shape to its exact geopolitical status. Convention and a tradition of political collaboration alone gave to the Tondaiman the position of “the early and faithful friend of the Company” and made “his country independent of our (the British Government’s) interference¹”.

The Tondaiman’s Powers : An Assessment.—The question can, however, be asked : ‘How different was the Tondaiman from the several palayakars in the Tamil land who were subordinate to sovereign authorities such as the Nayaks, the Nawab and the British?’ It cannot be answered better than by quoting *in extenso* a note² written by the Hon’ble Sir Alexander Cardew, Member of the Governor’s Council, on the 16th of April, 1918 : “It is quite true that the Raja of Pudukkottai or Tondaiman as he was always called, was a poligar and in the 18th century was continually referred to as occupying a position similar to that of the Raja of Ramnad, who was called Maravar. Letters were frequently addressed by the Madras Government to, ‘Tondaiman, Maraver etc., Poligars’

¹ Darbar Records, Pudukkottai.

² Tamil Nadu Archives Records, Madras.

and in one of the very earliest instances, a letter of 5th December 1740, it is said that 'the Polligars of Maravar and Tondaiman had raised an army of 45,000 men to set a certain prince on the throne of Trichinopoly. But though it is true that the Tondiman was a poligar in the 18th century, it would, I think, be easy to exaggerate the importance to be attached to the fact. Tondiman—though in some respects a feudatory of the Nawab, as the Nawab was of Delhi, was in a superior position to the hundred and one petty poligars of the Carnatic. It is atleast open to question whether it can safely be said that Tondiman was 'merely a poligar under the Nawab'. There were various degrees of subjection to the Nawab and certainly Tondiman occupied a different position from that of an ordinary poligar. In the Resident's letter of 28th May 1803 it is expressly stated that Tondiman was 'nominally exempted from the payment of tribute' to the Nawab of the Carnatic, and the nuzzers etc., extracted from him by the Nawab were described as having been 'extorted'. The Nawab, when his military power happened to be sufficient probably exercised a suzerainty over both Tondiaman and Marravar ; when it did not, he merely claimed to possess it. The British Government undoubtedly inherited from the Nawab a similar suzerainty over Pudukkottai, and as its power is supreme can always exercise it. Therefore it can, inspite of the absence of a formal treaty, insist on its advise being accepted. The suggestion, which was apparently considered in 1865 and 1875, of reducing the Raja of Pudukkottai to the position of an ordinary zamindar has not much importance. It would be open to the sovereign power to take this step with any feudatory State on breach of the terms of the Treaty and the absence of a formal treaty with Pudukkottai would not greatly affect such an act which would still be an act of annexation, for Pudukkottai is not a part of British India. In fact none of these matters seem to be of any very practical importance. If Pudukkottai was in the 18th century, much in the same position as Ramnad (though there were differences), she is not in that position now. The State has long been recognized as a feudatory State, the Raja is a quasi-independent ruler with full powers of administration ; he is entitled to the style of His Highness and to a salute of 11 guns ; and communication with his Government's through a political agent, except when His Excellency the Governor, writes a personal letter to him. The Government of India and Secretary of State have long adopted the policy of maintaining the

status quo in regard to native States, even if they don't go farther and actually enhance the privileges which the ruling chiefs possess. Even in the case of a petty Jagir (that of Arni) which possessed no deed of permanent settlement and for which a fresh sanad was issued at each accession, the Government of India forced us a few years ago merely on the ground of long continued usage, to recognize the hereditary character of the estate and to grant a permanent sanad. Still less likely would they be to treat Pudukkottai otherwise than as a native State."

Martanda Tongdaiman's powers were subject, nonetheless, to the following¹ restrictions :—

"(1) No alterations prejudicial to the recipients shall be made in the allowances which have been granted to the Western Palace Jaghirdar and his family except with the approval of the Government of Madras ;

(2) All Regulations shall be submitted to Government through the Political Agent prior to their introduction ;

(3) All irrigation and boundary disputes with British Districts shall be disposed of by the Madras Government ;

(4) His Highness shall not, without first consulting the Political Agent, dismiss or appoint high officials ;

(5) His Highness shall keep the Madras Government informed through the Political Agent of all important changes or measures which may be in contemplation in order that the Paramount power may be afforded an opportunity of tendering its advice ;

(6) The Budget Estimates and the Administration Report of the State shall be furnished to the Madras Government annually through the Political Agent ;

(7) His Highness shall maintain the impartial administration of justice ;

(8) His Highness shall not inequitably add to his Revenues or to the taxes payable by the inhabitants of the State ; and

(9) His Highness will be guided at all times by the advice which may be offered to him by the Governor in Council, Fort St. George, through the Political Agent."

¹ Darbar Records, Pudukkottai. The Darbar listed out in 1905 the conditions in a draft report to the Government of Madras in connection with a proposed revision of Aitchison's Treaties, Engagements and Sanads.

Pudukkottai in the Twentieth Century.—Four years after taking over the administration, the Raja made arrangements for a visit to Europe which was to be the first of many. A Council of Administration was formed, consisting of the Diwan and a Councillor, the Raja's elder brother Vijaya Raghunatha Durai Raja being appointed to the latter post. Travelling in the high seas was precarious in those days. The P. and O. ship carrying Martanda Bhairava, S.S. *China*, was wrecked off Perim, near Aden. The Raja, however, continued his voyage in another vessel, reaching England after a tour of the continent. While in England, the Raja was received by Queen Victoria at Windsor Castle on the 14th of July 1898. In 1904, the Raja called on the Governor-General, who was on tour, at Madras. The Governor-General observed in a note¹ on the 6th of August 1904 : “ Shortly before I left Madras he asked me to get him some political, diplomatic or military employment under the Imperial Government and I told him, of course, that his business in life must be the administration of his State. This request and his constant craving for European travel are a sufficient indication of his boredom at Pudukota.” The Raja, abroad again, returned to Pudukkottai in November 1898. The following observation of B.V. Kamesvara Aiyar in *A General History of Pudukkottai State* is interesting if not quite credible : “ Since then His Highness has visited Europe several times, his health having failed owing to the contraction of a severe type of malaria caught during a shooting excursion to the Bengal jungles and necessitating residence in a more genial climate during the hot weather in India and a regulated course of cures in the watering-places of the continent.” A sum of Rs. 1,03,446 was spent in connection with the Raja's visit to Europe in 1905-6. The Government of Madras observed² : “ In the year there was much distress among the peasantry which reacted on the finances of the State and rendered the work of administration more than usually difficult . . . The Raja . . . was unable to tour in the State during the 3½ months of the year he spent in India and was out of India during the remaining 8½ months.” On a visit to England in 1911, the Raja attended, in Westminster Abbey the coronation of Their Majesties King George V and Queen Mary.

¹ National Archives Records, New Delhi.

² *Ibid.*

In February 1913, Pudukkottai celebrated the silver jubilee of Martanda Bhairava Tondaiman's ascent to the Pudukkottai throne with spectacular displays of fireworks and processions. 'Boons were granted on the occasion, which are a strange amalgam of the medieval and modern :

(i) Remission of the village karnams' cess commonly known as the "Kanakku Vari" amounting to Rs. 25,000 for a period of three years.

(ii) Remission of the house-tax commonly known as "Mohturpha" amounting to Rs. 5,000 for a period of three years.

(iii) Remission permanently of the tax levied on bangle-makers and dhobies' earth.

(iv) Association of elected representatives in a legislative advisory council to be newly constituted.

(v) Grant of the privilege of election of two members of the Municipal Council as vacancies occur.

(vi) Opening of an Agricultural School in the town and the grant of two continuation agricultural scholarships in the College at Coimbatore.

(vii) Special grant of an annual sum of Rs. 5,000 for three years for the construction of buildings for Elementary Schools in rural parts.

(viii) Grant of special grain compensation allowances to permanent and temporary servants of the State drawing Rs. 10 and less for four additional months.

(ix) Grant of special local allowances to servants of the State drawing Rs. 30 and less when employed in localities where Prices are especially high in the neighbourhood of Nattukkottai Chetty villages.

(x) Grant of Rs. 1,000 to the Town Hall in the capital to enable the Committee to finish the building.

(xi) Grant of Rs. 10,000 for the formation of Silver Jubilee agricultural seed banks.

The Raja was in Europe when the first World War broke out. He and his brother the Diwan were at Aix-las-Bains when the general mobilization of the French army was ordered. With the help of the British embassy at Paris, travelling by car, they reached Dieppe in time to catch the last boat to England. The very night they reached London, England declared war. Martanda¹ offered his personal services "and all that he possessed" to the King-Emperor. We find, however, that in this visit of his to London, the Raja was charged² before one of the Magistrates at the Tower Bridge Police Court for exceeding the speed limit and refusing to produce a licence. The India Office, London, which was consulted by the Home Office on whether the Raja was entitled to immunity from criminal proceedings replied: "For the purposes of municipal law their territory is not British territory, and their subjects are not British subjects. But they have none of the attributes of external sovereignty, and for international purposes their territory is in the same position as British territory, and their subjects are in the same position as British subjects" and expressed the opinion that the Raja was not exempt from criminal proceedings. The Raja pleaded guilty and was fined £6. The incident *per se* was insignificant and is related here only to show the legal position of the Tondaiman and his 'country' as it then stood. Returning to Pudukkottai in November 1914, the Raja addressed a public meeting in the Town Hall and said in what was, by any standards, a moving speech: "Of all Indian States, Pudukkottai stands in peculiar relation to the British Power. A hundred years ago, it was written of us in the English official despatches—"It is impossible for any servant of the Company not to feel the greatest regard and respect for the Tondaiman family. In prosperity or adversity, from the earliest period of our connection with them, they have never failed us; neither considerations of danger nor allurements of advantage have ever induced them to swerve from their allegiance and their services, sometimes in very critical conjunctures, when we were struggling for Empire, have been eloquently recorded in the pages of history." Such eloquent testimony to our services shall not be falsified now. Let us not think that

¹ Martanda was, strictly speaking, not a Tondaiman but, a Pallavarayar, being the son of Ramachandra Tondaiman's daughter, Brihadamta Amman, Saheb, wife of Kolandaswami Pallavarayar.

² National Archives Records, New Delhi.

we here can do little. If we cannot help by personal service, we can help in several other ways. Here I may mention that I offered to raise a regiment in the State. My idea was that we could thereby look after our interests in Southern India and enable the British Government to utilise their regular regiments stationed there, for service in the front."

In 1915 the Raja went to Australia and on the 10th of August that year, married, in Sydney, Esme Marie Fink,¹ daughter of a Melbourne barrister, Wolfe Fink. On July 22, 1916, a son was born to the couple at Sydney, and was named Martanda Sydney Tondaiman. The Raja was in Sydney when, in 1919, the Afghan invasion of India took place. He cabled to the Darbar: "Place with Loyalty Respects State Resources At Viceroy's Disposal—Pudukotah." The Viceroy, on receipt of the cable, sent his "warm thanks" for the "patriotic offer".

The War and Indian Nationalism:—The World War I, which Martanda Bhairava Tondaiman saw breaking out in Europe, had serious repercussions in India. The Raja was not alone in offering to assist in the effort. Large and generous contributions in men, money and munitions flowed from India. Lord Birkenhead (later Secretary of State for India) observed: "Without India, the War would have been immensely prolonged, if indeed without her help it could have been brought to a victorious conclusion.... India is an incalculable asset to the mother country." Simultaneously, however, the War had another effect. It quickened nationalist consciousness in India.

Mohandas Karamchand Gandhi, freshly returned from South Africa where he had gallantly espoused the cause of Indian subjects, in a speech delivered at Karachi on February 29, 1916, said: "A new hope has filled the hearts of the people, a hope that something is going to happen which will raise the Motherland to a higher status." The British saw that as a *quid pro quo* for Indian support, some gesture was necessary. E.S. Montagu, Secretary of State for India, made, therefore, the following significant announcement on August 20, 1917: "The policy of His Majesty's Government, with which the Government of India are in complete accord, is

¹Esme Fink was better known by her house name, Molly.

that of the increasing association of Indians in every branch of administration and the gradual development of self-governing institutions with a view to the progressive realization of Responsible Government in India as an integral part of the British Empire." Montagu also announced that he would proceed to India in order to consult the Viceroy and to give a hearing to all those interested in India's movement towards self-governance. The Montagu Mission came to India in 1917 and, in 1918, was published the Montagu-Chelmsford Report. A special session of Indian National Congress held at Bombay in 1918 condemned the proposals as "disappointing and unsatisfactory" and suggested that something more be done to prove British intentions of giving self-government to India. War had led to additional taxation. A consequential rise in the prices of articles of necessity had, in the meantime, created acute discontent against British rule. Muslim sentiment in the country had been deeply stirred by the *Khilafat* movement on the issue of the future of Turkey after her defeat in World War I. The Rowlatt Bills, which were to have had the effect of perpetuating some of the extraordinary powers taken by the Government during the War, were greatly resented throughout the country. Gandhi organised a country wide movement of passive resistance, to curb which the Government adopted measures of great harshness. The massacre by British troops of 379 unarmed, defenceless and trapped persons in the Jallianwala Bagh at Amritsar on April 13, 1919 was the blackest act of all. Martial law, arrests, confiscations, floggings, shootings and hangings were used commonly. All these shocked the people of India. Gandhi, who transformed the national sentiment into a virtually irresistible mass struggle. As C. F. Andrews¹ said "Mahatma Gandhi spoke to the heart of India the *mantram*—Be free, Be slaves no more—and the heart of India responded." The response included the surrender of titles, honorary offices, the resignation of Indian members from local bodies, boycott of foreign goods, adoption of *swadeshi* cloth, revival of hand-spinning and hand-weaving, besides non-payment of taxes. The Congress defined its objective as being the "attainment of swaraj by the people of India by all legitimate and peaceful means". Mahatma Gandhi and other Congress leaders undertook a whirlwind tour of the country.

1. *The Gazetteer of India* (1973) : page 571.

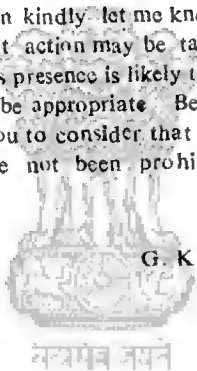
As part of his journeys in the Madras Presidency, Gandhi had planned to pass through the Pudukkottai State on his way to Karaikkudi in Ramanathapuram district. G. Krishnaswami Ayyar, then Chief Magistrate at Pudukkottai, penned¹ a hurried note on the 18th of September, 1921, to Sidney Burn who was then Superintendent of Pudukkottai State²:

Urgent and Confidential

Dear Sir,

I understand that Mr. Gandhi is to pass through Pudukkottai on the 20th instant and that an address is to be presented to him at Pudukkottai on that day. A few days ago you wanted me to prohibit his passage through the State. If you are still of the same opinion kindly let me know soon and also instruct the Deputy Superintendent so that action may be taken without delay. It will have to be said in the order that his presence is likely to disturb the public tranquillity as no other term appears to be appropriate. Before deciding one way or the other, I would again request you to consider that his passage in British territory or delivering speeches have not been prohibited though the speeches are violent.

Yours sincerely,
G. KRISHNASWAMI AYYAR.



Burn replied to the Chief Magistrate .

I am of the same opinion still about Gandhi. His passing through here will certainly disturb the public tranquillity, and he must not come. I have written accordingly to Deputy Superintendent yesterday. I do not think he has received addresses in any Indian State. Yet, and he is not going to begin with Pudukkottai. A man who calls the Government "Satanic" and foresees the time when he will have to call for general civil disobedience, even at the cost of rivers of blood. We cannot have him here.

Yours sincerely,
SIDNEY BURN
18th September 1921.

¹ Darbar Records, Pudukkottai.

² In 1909, a State Council had been created consisting of three members—a member of the I.C.S. as Superintendent of the State, a Diwan, and the Chief Judge as ex-officio Councillor. G.T.H. Bracken was Superintendent from 1909 to 1913, J.T. Gwynn from 1913 to 1915, and Sidney Burn from 1915 to 1922.

Sir

I have the honor to acknowledge
the receipt of your letter of the
18th inst. I had intended
to pass through the Indian Office
state on my way to Cheltenham. But
in view of your letter I shall
alter my route. I have &c

F.L.G. 19

He wrote simultaneously to Vijaya Raghunatha Durai Raja, the Diwan : " I hope you will agree with my action. We have enough of Gandhi's spirit without having himself here." Burn sent, therefore, the following letter to the Mahatma who was then at Tiruchirappalli :

Sir,

We have reason to believe that you are intending to proceed on the 20th instant from Trichinopoly to the Chettinad; we are further informed that you propose to travel by road through this State. Assuming that this information is correct I write to say that you will not be allowed to pass through this State. If you attempt to do so, you will be stopped at the frontier by the Police.

Yours faithfully,
SIDNEY BURN,
For Darbar,
18th September 1921.

He received the following reply :

Sir,

I have the honour to acknowledge the receipt of your letter of the 18th instant I had intended to pass through the Pudukkottai State on my way to Chettinad. But in view of your letter I shall alter my route.

I have etc.
M. K. GANDHI.

Mahatma Gandhi reached Karaikkudi via Madurai on the 22nd of September. He apparently did not think Burn was worth the candle.

Certain non-official members of the Pudukkottai Municipal Council led by G. Sundaresa Sastri, G. Sundaresa Aiyar, S. Visvanatha Aiyar and K. B. Chetti, had earlier passed a Resolution at a meeting of the Municipal Council to present Mahatma Gandhi with an address of welcome on his entering the limits of the Municipality. The Darbar, under relevant powers, cancelled the resolution, Burn declaring Gandhi as " an avowed enemy of the State ". Denied their desire of having the Mahatma amidst them, and bound down thus by the orders of the Darbar, these four members went on to Karaikkudi where Gandhi had reached earlier, and

there presented the impugned address to him "on behalf of the people of the town of Pudukkottai". The darbar, consequently, removed from membership of the Municipal Council all of them. Martanda Bhairava Tondaiman, to whom the connected papers were shown on 24th January 1922 noted : "I congratulate you for taking such a prompt and righteous step."

The Superintendent, Darbar, and Raja were quite out of step with the times. Nationalistic winds had been blowing in Pudukkottai quite strongly since 1920 when S. Satyamurthi, the leading Congressman from Tirumayam, had made a stirring speech at the Pudukkottai State Peoples Second Conference calling upon the State's population to join the nationalistic movement. K. Nagarajan^a writes : "S. Satyamurthi was just then beginning to get his feet on the ladder of fame. He rose from small beginnings. The family owned some land in the neighbourhood, never much, and nearly all of it went to educate him. He had received his education in the Rajah's College, Pudukkottai and later on, in the Madras Christian College. He went in for law, "devilled" for S. Srinivasa Aiyangar and ultimately abandoned it for politics where his real vocation lay. This bias in favour of politics became more and more pronounced by his association with Srinivasa Aiyangar, who was a great lawyer. His partiality for politics found its earliest expression at a meeting which he called in an old disused barn at Pudukkottai, to protest against the Partition of Bengal. The meeting was about a dozen strong and the average age of the participants fifteen. Satyamurthi spoke—the only one who did—and I can swear it was his first political pronouncement. Nobody was very clear as to what it was all about, nor do I suppose Satyamurthi himself was, but his speech was all fire and brimstone. If the child is father to the man, the embryo was even then visible to those who had eyes to see which, of course, no one had. It is the retrospective eye which perceives, in the light of later knowledge, the embryo which developed into the child and grew into the man

^a 12th November 1920.

^a Author and lawyer, Pudukkottai. The excerpts are from his unpublished memoirs.

we came to know. The little world to which he belonged believed he would collect a law degree, settle down to a snug practice in Pudukkottai, make his pile and end up, inevitably, on the Bench. He came very near doing it and, if he had done so, he would have gone to the cremation ground, not altogether unhonoured and unsung. A conventional panegyric would have been composed and his portrait hung up in the Bar Association Room, to be taken down later, to make room for other and newer claimants to photographic fame. It was S. Srinivasa Aiyangar who perceived Satyamurthi's mettle and encouraged him to enter politics, and when Srinivasa Aiyangar left the Congress he had too much of a will of his own to be content with toeing the party line—Satyamurthi stayed on. To have gone into the wilderness would not have suited him. He had tasted the pleasures of the platform, enjoyed the plaudits of the crowd and chuckled to himself at the stings and satirical remarks of those who resented his rather meteoric rise to fame."

The Raja was awarded a lumpsum payment of Rs. 20 lakhs, in 1923, which was intended to be a permanent provision for the Rani and their children. This was, virtually, in the nature of the terms of an abdication. The Raja had decided in 1922 to reside permanently out of India, vesting the administration of the State in a Regent to which office the Raja's brother V. Raghunatha Dorai Raja, the Diwan, was appointed.

On the 28th of September, 1923, the Government of Madras issued the following press communique :

"With the approval of the Right Honourable the Secretary of State for India, the Government of India have decided that with effect from the 1st October 1923, all the five Indian States in the Madras Presidency, viz. Travancore, Cochin, Pudukkottai, Banganapalli and Sandur will be brought into direct political relations with the Government of India through an Agent to the Governor-General who will be a Resident of the Second class with Headquarters at Trivandrum. The Agent to the Governor-General will correspond direct with the Collectors of Trichy, Kurnool and Bellary who will act as ex-officio Assistants to the Agent to the Governor-General in matters affecting the States of Pudukkottai, Banganapalli and Sandur respectively and also with the Madras Government and its local officials as occasion may require."

With this reorganization a certain degree of political modernization ' became inevitable. In the year 1924, the State was given a Legislative Council, amalgamating an old Representative Assembly (founded in 1902) and the Legislature Advisory Council (founded as one of the Silver Jubilee ' boons ' in 1915). It was created " to ascertain from the representatives of the people what the people wanted the Government to do for them ". It was to consist of 50 members of whom 35 were to be elected and fifteen nominated. The nominated members were to include the officials in charge of the several departments. In 1927 when elections were held to the Legislative Assembly, one lady and one harijan member were included in the nominated list. The Council had the power of making laws and Regulations but all these had to be submitted through the Diwan to the Raja for his assent. No bill could become law without such an assent. It was made clear that the formation of the Council did not affect the " Prerogative Right of His Highness the Raja to make and pass Regulations and Proclamations independent of the Council. " On the 21st of September, 1927, elections took place to the Legislative Council. The same evening Mahatma Gandhi paid his first and last visit to Pudukkottai. He came by road from Tiruchirappalli at 4 p.m., accompanied by his wife Kasturba, his secretary Mahadev Desai and Tamil Nad Congress Leaders C. Rajagopalachari, S. Ramanathan and T. S. S. Rajan. The Pudukkottai stalwart S. Satyamurthi could not accompany the Mahatma as he was then under orders of externment passed by the Darbar. The party stayed at a house owned by Annamalai Chettiar, in the town. A public meeting was organized in the Town Hall, where an address of welcome and a purse was presented to him. A mild drizzle fell over the large gathering as the Mahatma addressed it. Speaking in English, he touched upon his ' favourite ' subjects of charkha, prohibition, untouchability, sanitation'. The visitors left Pudukkottai thereafter for the Chettinad.

In the results of the election held on that day and were announced later, the successful candidates included S. Visvanatha Aiyar, one of the leaders of the 1921 move to present Mahatma Gandhi a welcome address at Karaikkudi.

¹ *Collected Works of Mahatma Gandhi*, Volume Thirty-five

By this time nationalist sentiment had become discernible in many forums. One was the local Press. To quote Nagarajan again: "In 1927, the Editor of a local Tamil weekly was prosecuted for sedition, mainly because he had published in his paper a Tamil translation of a speech in English delivered by S. Satyamurthi on the question of the succession to the Pudukkottai Raj. It arose in this way. The Government of India's decision on the question of succession was kept a closely guarded secret and the impression had gained ground that the Raja's son (by his Australian wife) would be allowed to succeed. An agitation—very mild—followed. To be ruled by one who was only half-a-Hindu would be against law, tradition and sentiment, but the people of the State, being timid by nature, did not raise any serious protest. Satyamurthi then took a hand; he felt that if the popular will did not express itself, judgement might go by default and that the people would be faced with a *fait accompli*, the recognition by the British Government of the unwanted son as the heir to the Throne. So he made a speech drawing the attention of the people and of the Government to the danger threatening them. In the course of the speech, he referred to the Raja as a *patita*, one who had placed himself beyond the pale by marrying one who was not a Hindu. The speech was published in *The Hindu*—the leading Madras daily—but the State took no action against the paper as to do so would have been to raise a hornet's nest around its ears. The local paper, *Janamitran* which published a Tamil translation of the *Hindu* report, was small fry, near at hand, and so the *Darbar* launched prosecution against him and they issued a Proclamation banning Satyamurthi from entering the State limits. The Editor's brother who had been at college with me and was practising as a lawyer at Pudukkottai asked me to appear for the Editor and defend him, which I did. The local Deputy Superintendent of Police gave me a gentle hint that I had better not appear for the accused as I might be misunderstood in higher quarters. I declined to take the hint. If the Editor had expressed contrition for what he had done, the *darbar* would have been glad to drop the prosecution, but the Editor was made of sterner stuff than that. K. S. Ganapathi Aiyar of the Trichy Bar, a lawyer every inch of him, was appointed Special Public Prosecutor. As the newspapers say, "Great sensation prevailed". The Editor was hailed as a hero, but not in public.

He was sentenced to six months simple imprisonment and we went up on appeal. The speech and a leading article published in the *Janamitran* were not particularly vicious but well within the limits of what the law calls fair comment. But there was a nicer point involved. I contended that there was no provision for prosecutions for sedition in the State. We had no Penal Code of our own, we had issued a Regulation adopting the Indian Penal Code, *mutatis mutandis*. In that Code, Section 124(A) made sedition of the King-Emperor or of the Government established in India an Offence. The prosecution contended that, in Pudukkottai, one should, read 'His Highness the Raja' for 'His Majesty the King-Emperor'. I replied that it should not be done because such a change was not necessary in order to make sense. The King-Emperor represented the Paramount Power and it was reasonable to retain the section as worded in order to protect the King and his Government from seditious attacks. It was not as if we had introduced, say, the Russian Penal Code and we should therefore substitute the Raja for the Czar. I cited the example of the Travancore Penal Code which contained provisions in respect of sedition against the Maharajah of Travancore as well as against the King-Emperor. The Chief Judge asked me if a person could owe allegiance to two powers and when I said he could, he asked me to cite an instance. I said, in medieval Europe, people owed allegiance to their temporal sovereign and also the Pope. The Chief Judge was not impressed and asked me to start talking prose. The conviction and sentence were upheld. The darbar later granted the accused person a remission of two months. The case was fought out in an air of unreality. The Raja had abdicated and the State was run by his brother as Regent, assisted by a Diwan. So there was no Raja on the Throne who could be assailed. The entire controversy about the succession was a needless luxury. We were fighting a battle already won. The Government had long ago made up its mind not to recognise the Raja's son, Martanda Sydney, as the heir to the Throne but they were keeping it a close secret. Actually, they had fixed upon one in the regular line of succession and when it was announced the choice was hailed with approval.

Marthanda Bhairava Tondaiman died at Paris on May 28, 1928.

The new Raja, Rajagopala Tondaiman, grandson of Minambal Rajayi, a sister of Martanda Bhairava Tondaiman, was six years old at the time of his installation. He was the ninth Tondaiman in the line of rulers inaugurated in 1686 by Raguhnatha Raya Tondaiman. He was, however, a direct agnatic descendant (the eighth) of Raghunatha Raya Tondaiman, unlike Martanda Bhairava Tondaiman, who was his predecessor Ramachandra Tondaiman's grandson by a daughter, though adopted by him.

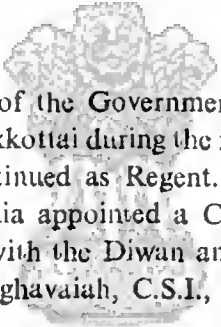
Notwithstanding the nationalist stirrings, Pudukkottai's attachment to its royal family was strong: *The Mail* of November 20, 1928, described the ceremony marking Rajagopala Tondaiman's installation thus: "There may have been no Ayodhya after Valmiki, but Hindu preceptors and those who follow them have at all times looked on their ruler as Rama. The multitude that gathered before the temple of Brihadamba at Trigokarnam in Pudukkottah on Monday evening, when his Highness the Rajah Bahadur attended the temple, seemed to regard him and the deities before whom he said his prayers with equal reverence. Brihadamba is the tutelary deity of the Rulers of Pudukkottah, who are installed at the temple and style themselves as Brihadamba Das, or the devotee and servant of Brihadamba. On Monday, at 4-30 p.m., H.H. the Rajah drove in State to the temple for the Pattabishekam and was received on arrival by the priests attached to the temple. His Highness, after he had taken his bath, was conducted to a Mantapam or platform, where he took his seat on a pedestal covered with a tiger skin which is a symbol of victory or power, as Shiva wore skins of tigers. The priests chanted Vedas and the Patnam, an ornament for the forehead, denoting suzerainty, was worn by his highness, the ornament having been tied round his head by the Regent Sahib. His Highness then gave presents of clothes and money to Brahmins, after which he proceeded to the sanctum sanctorum along a passage between rows of pillars passing through a series of chambers. In the spacious, but dark interior of the temple, where the sun cannot enter, hundreds of tiny lights from the stone walls, pillars and doorways, winked at the visitor like stars on an inky sky. A door opened and in the brown light of torches Brihadamba looked on the worshippers sitting in jewelled state. Bells rang, conches blew, cymbals clashed and the



Sir Alexander Loftus Tottenham, Administrator and Diwan of Pudukkottai—1934-1946

Courtesy : Thiru Radhakrishna Tondaiman former Rajkumar of Pudukkottai

voice of a hundred priests and Dasies rose in prayer and invocation as the Purohit, or chief priest, stood before the Rajah with the sword of Brihadamba, the sword with which the Tondaiman had carved out a kingdom. His Highness received the weapon and joined in a prayer that it might triumph again and spare nothing that opposed the will of its giver. Moving a step forward His Highness bowed and spread before him a cloth of gold, into which the priest put a handful of rice which had been kept at the foot of the idol. The Rajah withdrew with the rice, which was carried on the back of an elephant at the head of the procession as His Highness returned to the Palace. It was rice for his food and he took it as all his predecessors had done to show that they would eat only the food that the goddess gave and sustain life only to serve her."



Pending the orders of the Government of India regarding the administration of Pudukkottai during the minority of the new Raja V. R. Durai Raja continued as Regent. On February 28, 1929, the Government of India appointed a Council of Administration with a President, and with the Diwan and the Chief Judge as ex-officio members. T. Raghavaiah, C.S.I., was appointed President.


On November 17, 1931, the Council was terminated, the Government of India ordering that the administration of the State be carried on by an Administrator, assisted by an Assistant Administrator. B. G. Holdsworth, I.C.S., became the first Administrator. On December 13, 1933, Pudukkottai received its first and last Viceregal visit when the Marquis and Marchionness of Willingdon came into the town to open the X-Ray department of the hospital. The eleven year old Raja, Rajagopala Tondaiman, ceremonially welcomed the Viceroy and Vicereine.

Sir Alexander Tottenham.

Six years after his installation, when the Raja was twelve years old, Pudukkottai witnessed a return to the paternalistic style of administration in its full Blackburnean sense. Sir Alexander

Loftus Tottenham¹ a widely read civil servant, who knew south India like the back of his palm, took over the administration of the State and the charge of the Raja on January 3, 1934. Tottenham, who spoke Malayalam and Tamil fluently had a great empathic bond with this part of the country—but with no sentimentality in it. “I take people as I find them”, he wrote to his sister, “Jew or Gentile, Hindu or Muslim.”²

The year of Tottenham's arrival in Pudukkottai was drought-ridden, as was the year in which Sashiah Sastri had come to take over the administration of the State. Famine had traditionally led to emigration from Pudukkottai to Ceylon. The following figures gathered from the Pudukkottai State Administration Reports are self-explanatory :—

<i>Year.</i>		<i>Number of persons who emigrated from Pudukkottai to Ceylon.</i>
(1)		(2)
1920-21	सत्यमेव जयते	669
1921-22		1,402
1922-23		3,019
*1923-24		3,387

*Famine Years.

¹ Tottenham, Sir Alexander Robert Loftus, Kt., born 31st July 1873, son of late Commander John Francis Tottenham, R. N., J. P. (son of late Lord Robert Tottenham, Bishop of Clogher): was unmarried, studied: Clifton College; Queens Colleges Oxford (Scholar), 1st Class Classical Mods. Joined the Indian Civil Service (1st Class), Madras, 1897, was Assistant Collector and Magistrate, Tiruchirappalli (1898), Assistant Collector, Head Assistant Collector, Sub-Collector, Collector, Joint Magistrate and Magistrate, Malabar, in turns between 1899 and 1906. Collector of Madurai (1911): Collector of Ramnad (1912-17). Collector of Chingleput (1918): Collector of Madras (1918-21): Commissioner of Income Tax, Madras (1922): Member, Central Board of Revenue, and Joint Secretary Finance Department, Delhi and Simla (1925-30). Knighted on January 1, 1931. Retired 1933. Administrator of Pudukkottai State 1934-1944. Diwan of Pudukkottai 1944-1946. Died: 13 December, 1946 at Pudukkottai.

² See Philip Woodruff's *The Men Who Ruled India*, Vol. II 19.

<i>Year.</i>	<i>Number of persons who emigrated from Pudukkottai to Ceylon.</i>
(1)	(2)
*1924-25	3,356
*1925-26	5,892
*1926-27	6,048
*1927-28	13,305
*1928-29	10,831
1929-30	4,315
1930-31	4,083
*Famine Years.	

The number, it can be seen, rose with the growing intensity of famine and subsided with the improvement in situation. This was not the first time that Pudukkottai was seeing emigration, nor the last. But it is clear that it was at this time that the phenomenon reached its peak. There is little doubt that this record flight of labour was due to the prevailing agricultural distress. The Administration Report for 1925-26, in fact, states this in so many words.

Emigration rose once more in the same curve during the famine¹, in 1933-34 and 1934-35, as can be seen from the following:—

<i>Year.</i>	<i>Number of persons who emigrated from Pudukkottai to Ceylon.</i>
(1)	(2)
1932-33	2,153
*1933-34	5,032
*1934-35	7,163
1935-36	3,485

* Famine Years.

¹ Remission was granted during this famine to the extent of 50 per cent of the assessment on wet lands that had either been left uncultivated owing to the shortage of water or had failed to yield a "four anna crop". The remission totalled Rs. 2,62,518. CP 22 of the 1938 *Manual*).

Droughts hit 'British' and 'non-British' territories without distinction. In the case of Pudukkottai, if anything, the impact of drought was more dire and certainly more swift than in adjoining British territories. If its districts were the immediate responsibility of the British Government, the Native States were under its definite if indirect control. The Famine Commission of 1901 had dismissed a suggestion for the refusal of relief to immigrants from Native States with the statement: ".....the attempt would be alike inhuman and impractical". It had pointed out that the Famine Commissions of 1880 and 1898 before it had also laid down the principle that "all comers, whether British subjects or residents of Native States, should be relieved without distinction."

The broad-mindedness which the 1901 Commission advocated in the matter of immigrants could have, with advantage, been applied in other directions as well. A solution to the irrigation problem of Pudukkottai is one such area.

A proposal involving the Mettur Canal had also been considered, which envisaged the canal passing through the Karambakkudi firka of Pudukkottai, bringing about 8,000 acres under wet cultivation. But the scheme reportedly¹ fell on account of the Madras Government's declining to accord to the ryots benefited by the scheme in Pudukkottai "the same terms as the British ryots".

In the year 1934, when the Cauvery-Mettur project had almost reached the stage of completion, Tottenham wrote² to the Government of Madras enquiring whether it would permit the Darbar to tap the Cauvery water anywhere and if so, (i) where and (ii) what the approximate amount of water available would be. He was aware of the earlier failure of this proposal. But, he wrote,³ "We are entirely dependent on precarious rainfall and to get an assured water supply for even a small area of wet lands would be a great boon". Tottenham was writing this, impelled by the 1934-35 famine. He wrote to say that he was aware that his was "rather a forlorn hope".

¹ p. 187 of the 1938 *Manual*.

² Darbar Records, Pudukkottai.

³ To C. A. Souter, Revenue, Member, Government of Madras, on 11th May 1935 (Darbar Records, Pudukkottai).

The following reply from the Government of Madras confirmed Tottenham's fears :

" I am directed to say that there are only two ways of supplying Cauvery water to the State, either by extending the Kattalai High level channel or through the Olavayal and Alivalam channels of the Grand Anicut canal. The Kattalai High Level channel is designed to carry supply just sufficient for its anaicut, and if extra water is to be allowed through the channel for the benefit of the Pudukkottai State, it would not only have to be extended by about 25 miles to reach the State boundary, but would also have to be widened throughout its length of 25 miles. The scheme is thus prohibitively costly. As regards the supply through the Grand Anicut Canal the Government regret that as the entire area of 301,000 acres allowed by the agreement with the Mysore Darbar has already been delimited in British territory, it is not possible to include any area in the State."

The Onset of Self-Government:—But while Tottenham exerted every nerve to relieve distress, he would countenance no 'nationalistic' trends¹.

Democracy, he was convinced, did not belong in India. He wrote : " To talk as if the people of India were downtrodden slaves is stupid and meaningless. And what *does* our 'yoke' amount to ? Little more than keeping the peace internally and protecting them externally²".

The Government of India Act of 1935, which was to confer Provincial Autonomy in the Provinces in British India, required elections being held. National leaders toured the provinces intensively in the years 1935-36, to prepare for the experiment. Jawaharlal Nehru, then President of the Congress undertook a whirlwind tour of the south in the October of 1936. He passed through Pudukkottai on October 16. An interesting episode took place on the occasion. *The Hindu* of October 16, 1936, reported it as follows :

" Leaving Karaikkudi at 6-30 a.m., Pandit Nehru motored through Pallathur, Kothamangalam and Tirumayam to Pudukkottah. The citizens, who had arranged a reception on the wayside and desired to take him through the town, were, it is stated

1. See Akilon's observations on nationalistic activities in H.H. The Raja's College, under Chapter XV.

2. See Philip Woodruff's *The Men Who Ruled India*, Volume II : 19.

asked to give up the arrangements. And at the place where the Pandit Nehru's party was expected to enter the town, a posse of reserve police were stationed under an officer. Further parties of police were posted near about the place.

Pandit Nehru, who was hurrying to Trichinopoly, arrived at the place where the police were, at about 9 a.m. A large number of citizens of Pudukkottah gathered near the place and cheered him but they were not allowed to approach Pandit Nehru. Pandit Nehru stopped his car and on enquiry was told that he should proceed along the outskirts of the town and should not enter it and the authorities required the car to move on. Pandit Nehru got down from his car expressing his intention not to be hurried. He walked several furlongs, the policemen following him.

Pandit Nehru enquired if any press correspondent was there whereupon a local journalist approached him. An officer further came up and said that Pandit Nehru should not talk to anyone. Pandit Nehru asked if he was under arrest to which the officer answered in the negative.

"If I am not", the Pandit said, "you cannot prevent my talking to anyone I choose".

The officer attempted an explanation but Pandit Nehru said he could not understand this strange attitude of the authorities.

As he was pressed for time and as it was getting late, he boarded his car again and left for Trichinopoly.

It was half an hour later that other members of the party whom the Pandit's car had far outstripped came up on the scene and learnt about the occurrence."

In an interview given later to *The Hindu* (and reported in the same issue), Nehru said: "One is apt to get a little tired mentally, after the continuous repetition of the same kind of incidents. Fortunately, Pudukkottah offered a variety. As we approached Pudukkottai town, I saw part of the Pudukkottah's army lining up the road in battle array. I was interested. Further up larger forces of the army occupied the road. This grew more interesting. So I got off the car and enquired from some one, who might be the head of the police or the Field-Marshal of the Pudukkottah Army, what all this was about. Were these manoeuvres of the army or had the international situation in Europe affected the Pudukkottah State and preparations were being made for a coming crisis? Or was a riot feared? I was told that the army had, turned out really to clear the way for me so that the crowds might not embarrass me—a very delicate compliment on the part of the Pudukkottah State to the President of the Indian National Congress, to which I was unaccustomed. I have so far had tremendous, receptions from all manner of people and crowds but to be escorted by an army through streets, lined with troops, was a Viceregal

experience which I have never had. So I thought I had better make the most of it whilst I had the chance and I decided to march through part of the territory of this great State. And so, we marched along, the Pudukkottah army following as well as a crowd of the people of the State. It must have been a pleasing sight to which the State was not accustomed. We marched for a mile or so when, unfortunately, owing to pressure of time, I had to go back to my car. And so I waved good-bye to the Pudukkottah army and rushed away to Tiruchirappalli. This incident is full of meaning and shows us not only how States function but specially how they function under more or less British administration. For I understand that the ruler is a minor. I was passing through the State at a great pace as I had no time to waste. Probably I would not have stopped at all anywhere, but the State, full of fear of all manner of happenings, did the very thing which I could not have done owing to lack of time at my disposal, i.e. created a commotion all over its territory and drawn more attention to my passage than I otherwise would have. So far as I am concerned, I welcome this and I am grateful to the State authorities for these military arrangements made to welcome my passage through the territory. I understand that garlanding was specially forbidden by the State as a dangerous revolutionary activity which might upset the whole fabric of the administration. Probably the fabric is so flimsy that any breath of wind will blow it away and hence this excessive nervousness."

Had Tottenham permitted Nehru to motor through the town uninterrupted, the scenario would have been avoided. It was Burn all over again.

World War II was brewing then. And when it erupted, Tottenham galvanized the State for the war effort.

On 20th December 1939, a public meeting was held at the Town Hall to "give practical expression to the feelings of the people" and to make collections for the War Purposes Fund. On 16th July 1940, a second meeting was held to "co-ordinate and intensify the war effort, with the Raja presiding.

On the 17th of January, 1944, the Raja, ~~twenty-two years~~ old now, was invested with ruling powers. An Executive Council was appointed, consisting of a Diwan, and two Councillors. Tottenham became Diwan.

Whether it was the protection of ancient monuments, or the prevention of soil denudation; the spread of small savings or making arrangements for the Dasara festivities; the fight against famine or the investigation of mineral deposits; the holding of classes for the young Raja or arranging for local talented boys to be admitted to colleges at Oxford: 'fixing up' his bearer's son or instituting a trust for the State's destitutes; passing orders on an irrigation dispute or appealing for funds for the Bihar earthquake relief, Alexander Tottenham gave Pudukkottai of his best. And this was to Pudukkottai's great good, for Tottenham's best was something above the ordinary. Writing in his autobiographical memoir *The India We Left*, Humphrey Trevelyan writes: "... he was one of the best of the old type of Madras civil servant, more effective than some of the latter-day bureaucrats, unimpeachable in their morals, expert at handling files, but without human sympathy and so without the personal influence of the older breed. He understood issues clearly—a gift of mental clarity, and acted with resoluteness and a meticulous application to detail".

1945-46 were years of drought again. Tottenham estimated the rainfall during the season to be lower than any year except four since Fasli 1333 and the then season as being one of the worst in his tenure in Pudukkottai. An exchange of correspondence between him and the authorities at Madras over the question of the supply of rice to the State shows that the British Government's policy of viewing famines in the States as being "not quite their business", had persisted until the end of this State's individual existence.

From A.F.W. Dixon, Board of Revenue (Civil Supplies) to Alexander Tottenham, dated 27th December 1945 :

"As you probably, know, our food position this year is very difficult. The cyclone in the Northern Circars has caused us a loss of over a lakh and a half tons of rice. The drought in the centre of

the Province has caused failure of crops in North Arcot, Salem, Chittoor, Bellary and Ananthapur districts and has resulted in the Mettur reservoir becoming so empty that there will be partial failure of crop in the Tanjore Delta. Hence, we anticipate a deficit of between 5 to 6 lakhs tons of rice. The imports which we are to receive from overseas will not be nearly sufficient to meet this deficit. We are only awaiting an assurance from the Government of India that they can supply a sufficient quantity of wheat before we reduce our rice ration and increase the wheat portion of the ration making a part of it compulsory.

In these circumstances, you will realise that it will be difficult for us to increase the quota of rice to your State especially as our statistics do not suggest that a larger quota is required....."

From Tottenham to Dixon, dated 29th December 1945 :

"I know that you in Madras are in difficulties, but I should like you to reflect that after all, the relatively small quantity that we want will not make more than an infinitesimal difference per head to your millions in Madras. You seem to have doubted whether the season was as bad as I told you. I am constantly going about, and I *know* what the state of things is, and you may take my word for it, I think! This season is *one of the worst* that we have had since I have been here : nearly 12 years. Our rainfall from July 1st to the end of November this year was lower than in any but 4 years since 1923, and *very much lower* than in about half the years. Our rainfall in December has so far been 0.48 cents. The average for the month is 4.21 for the State.

These are figures for Pudukkottai, and while 3 stations are appreciably better (our rainfall here varies in the most extraordinary way from place to place, and there is a difference of over 7 inches between the highest and lowest yearly averages for 14 stations) 6 are worst and the rest, except 2 or 3, not much better.

We have no regular remission system here. This year, so far, we have had to declare that remission will be granted in almost 4 whole Revenue Inspector's divisions, except a few villages, and in 37 other villages, and that is in 2 taluks out of 3. We have not yet got the report for the other taluk.

Relief works are no good if people can't buy food with the wages they earn, as I think I said before.

Unless you can help us, it means actual widespread starvation, and the Darbar will be helpless. I can hardly say therefore how grateful we shall be for your assistance. At present, the situation is nightmarish !

All good wishes for 1946 (which I admit is optimistic !)."

Tottenham had asked for a quota of 2,300 tons of rice per month from Madras for the duration of the famine. Against this, Madras offered only 500 tons. On the Diwan's suggestion, the Raja of Pudukkottai addressed the Viceroy and the Governor of Madras on the subject. On the 7th of February, 1946, the Raja and the Diwan met the Viceroy, Lord Wavell, over lunch in Tanjore, where the Crown Representative had come as part of the famine-tour. Having heard Pudukkottai's case for more rice, the then Governor of Madras Sir Arthur Hope, gave the visitors not the desired allotment, but the ironic promise : "If we are to starve, we shall starve together".

Tottenham was right about his optimism. His health deteriorated suddenly. A short holiday and treatment in England seemed—at least to others—to have helped. But something inside him made him want to return to Pudukkottai. He did so, late in 1946. On the 13th of December, he was dead. A spontaneous turn-out of mourners from all over Pudukkottai State—farmers merchants, lawyers, clerks, students and the Raja—accompanied his bier to the small graveyard in the town's protestant church. A stone tablet was placed on it shortly thereafter with the inscription chosen by him :

ALEXANDER ROBERT LOFTUS TOTTENHAM

KNIGHT, G.I.E., I.C.S.

July 31st 1873.

December 13th 1947.

SEVENTH SON OF COMMANDER JOHN FRANCIS TOTTENHAM—R.N. SERVED IN INDIA FOR NEARLY FIFTY YEARS

WRITE ME AS ONE THAT LOVES HIS FELLOWMEN²

1. Tottenham correspondence furnished by the Tondaiman family of Pudukkottai.

2. From Leigh Hunt's *About Ben Adhem*.

The British period in India was now drawing to a close. It was clear that a transfer of power to Indian hands would have to be effected : the only question was, ' When ' . ?

1945, 1946 and 1947 were, therefore, years of intolerable suspense for the native princes. They did not know what place they might come to occupy in the constitutional changes that were imminent. On the 28th September, 1945, the Princes' Delegation to His Excellency the Crown Representative, stressed the need for safeguarding their position in the future set-up, whatever it might be.

In his opening remarks, the Chancellor of the Chamber of Princes said : " We have no desire to stand in the way of the country's constitutional advancement. We wish to see her free, strong and occupying her rightful place among the nations of the world. While we desire to co-operate to reach the goal which she has so long sought to achieve, we feel that we may also legitimately work for a purpose which, we believe, is not incompatible with such co-operation. We wish to survive as individual entities in the India of the future, maintaining an honourable existence and playing a worthy part in building up a great future for the country."

An interim national government had been formed in 1946, with the Viceroy, Lord Wavell, as Chairman and Jawaharlal Nehru as Vice-Chairman.

In 1947, Lord Mountbatten was sent out as Viceroy with the specific task of preparing a procedural plan for the handing over of power. Independence came on the 15th of August 1947.

"When Britain transferred sovereignty to India in 1947, the princes were refused admission into the Common wealth on their own rights. The British Government represented the whole of India in the comity of nations, and the princes and their subjects were " British subjects-under international law. But, within the empire, their position was determined by the peculiarities of the British constitution. Paramountcy over the princes was vested exclusively in the Crown, *i.e.* Parliament having nothing to do in the matter. Within India, the Indian states were not part of ' British India ' . and their subject were not ' British subjects ' . While the administration of British

India was vested in the Governor-General in Council in subordination to the authority of Parliament, it was the Governor-General acting in his capacity as 'Viceroy' that exercised the powers of paramountcy on behalf of the Crown. Despite this lack of legal authority, Parliament's control was complete in matters pertaining to the states, because of its omnipotence under the British constitution. In 1858 and 1947 when revolutionary changes were made by Parliament in the Indian political system, the states were considered as an integral part of India under the British Parliament.....At the last stage of India's struggle with Britain for independence, the states had no comparable national personality with British India, their position was one of complete subordination to the paramount power.....¹"

The states entered into standstill agreements² with the Government of India. Their administrative integration with the country, followed. The rulers of the Indian States negotiating terms with the Government at New Delhi. In one of his visits to the Indian capital at this time, the Raja of Pudukkottai called on Mahatma Gandhi, who was staying then at the Bhangi Colony, the residence of some of Delhi's harijans. That much water had flowed down the Vellaru since Burn's 1921 extenuation order on the Mahatma became clear as the Raja, after obtaining his permission, took several movie-shots of the Mahatma.

The socio-political winds blowing in the country made no distinction between the former British India provinces and the States. Mahatma Gandhi was assassinated on the 31st of January, 1948. On the twelfth day of the final obsequies of the Father of the Nation, the Raja of Pudukkottai issued a proclamation throwing the temples in Pudukkottai State to Hindus of all castes.

While there was a small body of opinion in the State which wanted its separate entity to be perpetuated even after independence, the general opinion was, quite naturally, in favour of the State's total integration with India as an inescapable and logical development. This view was articulated most significantly by the Pudukkottai lawyer and political activist, Muthuswami Vallatharas.

¹ *The Gazetteer of India*, Volume II (1973).

² For details sit fuocotational developments see under Chapter XVIII.

Merger.—The Pudukkottai State merged with the Dominion of India on the 3rd March 1948. The Raja had, earlier, signed the Instrument of Accession in New Delhi following personal discussions with Sardar Vallabhbhai Patel, then Deputy Prime Minister of India, who was in charge of the Ministry of States. It was decided that Pudukkottai be merged with the Madras State, as a revenue division in Tiruchirappalli district. The then Collector of Tiruchirappalli, V.V. Subramanian, I.C.S., himself a former student of H.H. The Raja's College, Pudukkottai, went on the 3rd of March, 1948, to Pudukkottai to take over the administration on behalf of the new Government.



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Chandrasekhar Sastri

F.I.G. 17

K. B. K. Gokulam

F.I.G. 18



सत्यमेव जयते

G. N. Muthukrishnan

F.I.G. 20

CHAPTER III—PEOPLE.

This territory, inhabited at first by hunters and sheep-rearers and then by Vellalars and Kallars, is peopled today by the descendants of these social groups and many others besides.

If the earliest and most pervasive language spoken in the tract is Tamil, it has known domiciled languages also—the Kannada of its Kurumbar and the Sourashtri of its silk-weaving Patnuls.

While the majority of its population has been busy forcing dry crops out of its red earth, Pudukkottai has also made its contributions to the arts and culture of the Tamil land. Its rock, which has shaped Hindu temples and Jaina monuments, has also gone into the making of Islamic monuments and places of Christian worship. From its temples has emerged a rich tradition of music and drama.

A Demographic Profile.

In the Census of India, 1971, the area comprising the present Pudukkottai district was found to be inhabited by 9,47,351 people. Of these, 4,71,067 or 49.7 per cent were men, and 4,76,284 or 50.3 per cent, women. This female majority is significant in the context of the following percentages.

Census of India, 1971.			
(IN LAKHS.)			
	<i>Total Population.</i>	<i>Female Population.</i>	<i>Percentage of Female to total Population.</i>
(1)	(2)	(3)	(4)
1 India	5,480	2,640	48.2
2 Tamil Nadu	412	204	49.5
3 Pudukkottai	9.47	4.76	50.3

Pudukkottai district can, therefore, derive the satisfaction of being ahead of both the State and the country in respect of the 'strength' of its weaker sex.* This is perhaps accounted for by the fact that the able bodied men from the rural and

chettinad areas migrated to other districts for long periods in search of gainful employment and even to places beyond the seas, such as Ceylon, Malaya, Singapore and Burmah.

The Office of the Director of Census Operations, Tamil Nadu and Pondichery, Madras, has furnished¹ figures of population in the areas now comprising the five taluks of Pudukkottai district, as reflected in the censuses from 1901 to 1971.

Name of taluk area.	1901.			1911.		
	Persons.	Males.	Females.	Persons.	Males.	Females.
	(2)	(3)	(4)	(5)	(6)	(7)
1 Kulattur ..	130,716	63,199	67,517	134,997	64,593	70,404
2 Alangudi ..	84,531	40,585	43,946	91,369	44,224	47,145
3 Pudukkottai ..	85,855	41,677	44,178	92,425	45,165	47,260
4 Tirumayam ..	133,254	61,455	71,799	149,596	69,877	79,719
5 Arantangi ..	113,264	55,520	57,744	115,025	54,364	60,661
Pudukkottai District ..	547,620	262,436	285,184	583,412	278,223	305,189

Name of taluk area.	1921.			1931.		
	Persons.	Males.	Females.	Persons.	Males.	Females.
	(2)	(3)	(4)	(5)	(6)	(7)
1 Kulattur ..	147,501	71,449	76,052	129,536	62,496	67,040
2 Alangudi ..	94,168	45,804	48,364	88,718	42,802	45,916
3 Pudukkottai ..	94,880	46,641	48,239	90,751	44,308	46,443
4 Tirumayam ..	149,906	70,167	79,739	149,494	69,481	80,013
5 Arantangi ..	121,477	57,551	63,926	115,141	54,306	60,835
Pudukkottai District ..	607,932	291,612	316,320	573,640	273,393	300,247

Name of taluk area.	1941.			1951.		
	Persons.	Males.	Females.	Persons.	Males.	Females.
	(2)	(3)	(4)	(5)	(6)	(7)
1 Kulattur ..	142,056	69,680	72,376	166,335	82,195	84,140
2 Alangudi ..	97,771	47,936	49,835	116,685	57,613	59,072
3 Pudukkottai ..	99,454	49,307	50,147	119,888	59,888	60,000
4 Tirumayam ..	159,694	75,403	84,291	153,408	72,488	80,920
5 Arantangi ..	123,731	59,535	64,196	147,786	71,080	76,706
Pudukkottai District ..	622,706	301,861	320,845	704,102	343,264	360,838

1. In a special analysis for the *Pudukkottai District Gazetteer*. The figures have been described by the Department as being 'provisional'. For the census years 1901 to 1941, the taluk-wise population has been estimated on a pro-rata basis with 1951 figures as the base. For 1951, 1961 and 1971, however, the data have been compiled for taluks by totalling the populations of the villages included in them.

Names of taluk area.	1961.			1971.		
	Persons.	Males.	Females.	Persons.	Males.	Females.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1 Kulattur ..	169,300	84,666	84,634	214,904	107,904	107,000
2 Alangudi ..	127,123	63,339	63,784	161,441	81,153	80,288
3 Pudukkottai	130,411	65,589	64,822	164,602	83,167	81,435
4 Tirumayam ..	162,659	76,592	86,067	197,443	94,628	102,815
5 Arantangi ..	160,968	79,148	81,820	208,961	104,215	104,746
Pudukkottai District. ..	750,461	369,334	381,127	947,351	471,067	476,284

According to the 1971 Census figures, the population in the areas now comprised in Pudukkottai district has 1,90,383 family units. The area has 1,77,470 houses. The total of 9,47,351 includes the district's institutional and houseless population. As many as 8,32,372 people (87.9 per cent) were, in 1971, found to reside in rural areas and 1,14,979 (12.1 per cent) in the district's towns¹ such as Pudukkottai. Nine out of every ten people in the district are, therefore, rural and one urban. In the rural population, women with 4,19,246 (50.4 per cent) form the majority, whereas in the urban population, women number 57,038 (49.6 per cent).

The district's total population forms 2.3 per cent of the total population of Tamil Nadu as computed in the Census of India, 1971. Its male population forms 2.3 per cent of Tamil Nadu's total male population and its female population 2.3 per cent of Tamil Nadu's female population.

¹The definition adopted for an urban area for the 1971 Census was as follows:—

(a) All places with a Municipality, Corporation, Cantonment or notified town area.

(b) All other places which satisfied the following criteria.

(i) a minimum population of 5,000;

(ii) at least 75 per cent of the male working population being non-agricultural;

(iii) a density of population of at least 400 per sq. km. (i.e., 1,000 per sq. mile.)

The Director of Census Operations was however given some discretion in respect of some marginal cases, in consultation with the State Government, to include some places that had other distinct urban characteristics and to exclude undeserving ones.

According to Indian Census Convention, any place with a population exceeding 1,00,000 is called a city.

The district population has been found to be distributed among the various religious beliefs thus ¹:

			<i>Male</i>	<i>Female</i>	<i>Total</i>
(1)			(2)	(3)	(4)
1	Hinduism	.. ..	4,18,456	4,22,529	8,40,985
2	Islam	.. ..	30,325	31,480	61,805
3	Christianity	.. ..	22,034	22,038	44,072
4	Sikhism	.. ..	3	1	4
5	Others	.. ..	248	236	484
6	Not stated	.. ..	1	..	1
			4,71,067	4,76,284	9,47,351

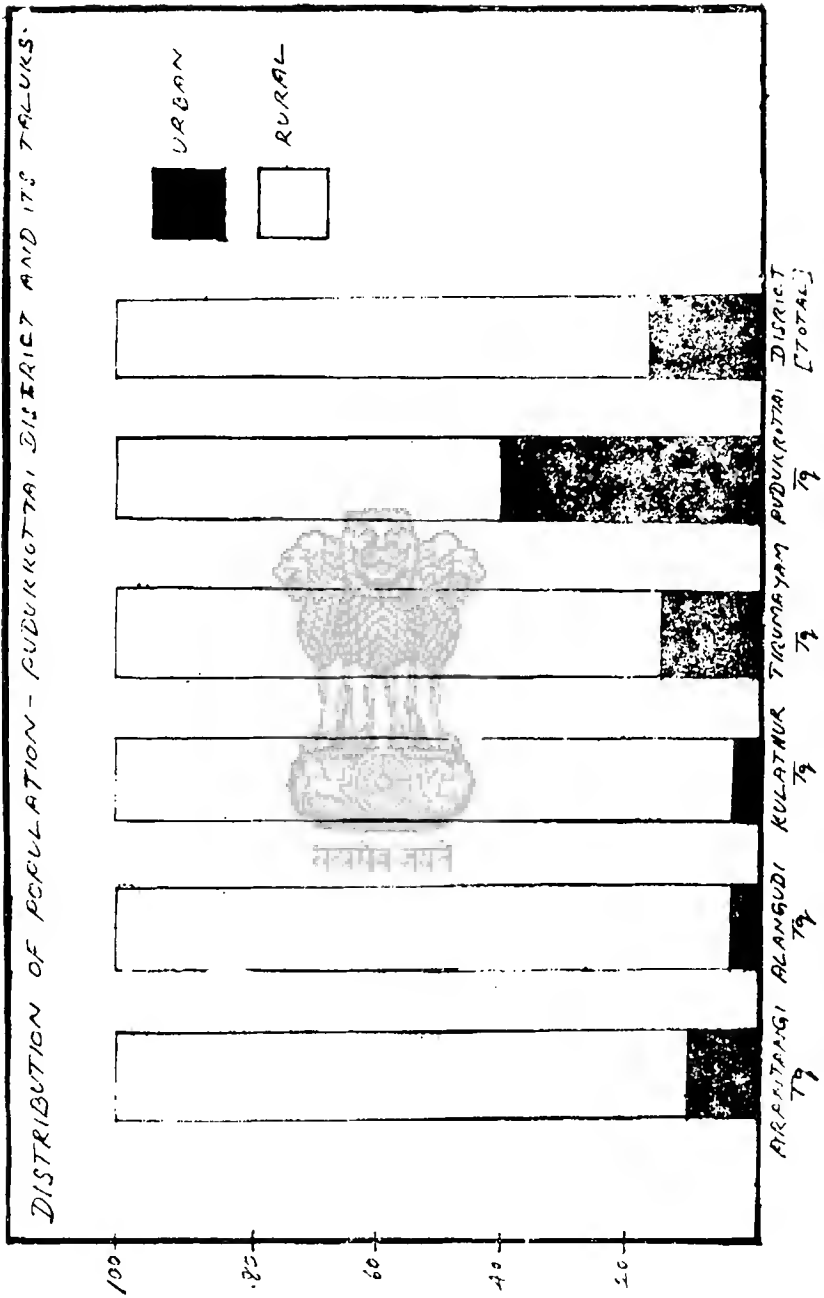
Of every ten persons in the district, therefore, eight are Hindus, one Muslim one Christian.

Not all the 9,47,351 work, of course. The children, the vast number of housewives, the old, the infirm and the unemployed are classified in the Census as 'non-workers'. The district's total 'worker' population is 3,23,649 (34.2 per cent of the total). In other words, of every ten people in the district, three are workers, and seven non-workers. The following table gives the details of Pudukkottai's 1971 occupational profile :

<i>Area sq. km.</i>	<i>Population.</i>		<i>Total workers.</i>	
	<i>Male.</i>	<i>Female.</i>	<i>Male.</i>	<i>Females.</i>
(1)	(2)	(3)	(4)	(5)
4650	4,71,067	4,76,284	2,71,157	52,492

<i>Area sq. km.</i>	<i>Non-worker.</i>		<i>Percentage of workers to total.</i>	
	<i>Male.</i>	<i>Female.</i>	<i>Male.</i>	<i>Female.</i>
(1)	(6)	(7)	(8)	(9)
4650	1,99,910	4,23,792	57.6	11.0

¹ The religion-wise distribution of the present population has been worked out by the Gazetteer-unit on the basis of the percentage of distribution of population among various religions in 1961. The same percentages have been projected on to the Census figures of 1971. The figures are, therefore, approximate.



The workers themselves are classified in three broad occupational groups or 'sectors'. The primary sector which refers to work in 'extractive' occupations such as agriculture, plantations, forestry, livestock, fishing, mining, quarrying; the secondary sector which include work in 'fabricative' occupations such as manufacture and construction; and the tertiary sector which refers to work or 'services' such as trade, commerce, transport, storage, communications, administration, medicine, law and domestic or personal services. The district's 'worker' population is divided among these sectors as follows:

Area sq. km.	Primary.		Secondary.	
	Male.	Female.	Male	Female.
(1)	(2)	(3)	(4)	(5)
4650	2,10,385	46,140	19,869	1,681
Area sq. km.	Tertiary.		Total.	
	(6)	(7)	(8)	(9)
4650	40,903	4,671	2,71,157	52,492

The above figures show that of every hundred workers in Pudukkottai district seventy nine are in primary, seven in the secondary, and fourteen in the tertiary sectors.

Of the district's 1971 population of 9,47,351 the scheduled castes form 16 per cent. Their taluk wise distribution is as follows:—

Taluk.	Scheduled Castes.		Total population.		Percentage of Scheduled casts to total population
	Male.	Female.	Male.	Female.	
(1)	(2)	(3)	(4)	(5)	(6)
Kulattur ..	19,341	19,010	1,07,904	1,07,000	17.8
Alangudi ..	14,038	13,832	81,153	80,288	17.3
Pudukkottai ..	14,425	14,151	83,167	81,435	17.4
Tirumayam ..	15,214	16,015	94,628	1,02,815	15.8
Arantangi ..	12,688	12,580	1,04,215	1,04,746	12.1
Total ..	75,706	75,588	4,71,067	4,76,284	16.0

The district's population of scheduled tribes is distributed thus :

Taluk.	Scheduled Tribes.		Total.
	Male.	Female.	
Kulattur .. ..	..	..	..
Alangudi	20	13	33
Pudukkottai .. ..	..	..	..
Tirumayam	72	71	143
Arantangi	44	58	102
	136	142	278

In the Census of 1931, the figures of which have been reproduced in *A Manual of the Pudukkottai State*, Volume 1 (1938), the following social groups in the erstwhile Pudukkottai State were, numerically, the first ten. Each of these had a population forming over two per cent of the Pudukkottai State's total population¹.

(i) Kallars (including those listed as Kallars, Valavars, Agamudayars, Maravars, Ambalakkars, Servais).	67,073
(ii) Harijans ²	41,578
(iii) Idayars	25,251
(iv) Chettis	20,438
(v) Vellalars	16,761
(vi) Kammalars	14,380
(vii) Udayars	12,408
(viii) Brahmins	11,769
(ix) Uralis	9,378
(x) Muttiriyars	8,001

¹ The State had a population of 400,694 in 1931, its area was 1,179 sq. miles.

² The term 'harijan' is not used in the *Manual*, which employs terms which are no longer current such as Paraiyan, Pallan, Chakkiliyan.

Distinctive Social Groups.—Pudukkottai like most other district in Tamil Nadu, houses a cross-section of communities. Almost all the major Tamil social groups are represented here in varying degrees. Of considerable sociological and numerical significance¹, among these are the Kallars and the Nattukottai Chettiars. These two social groups are also spread over the districts of Ramanathapuram, Madurai, Tiruchirappalli and Thanjavur. In Chapters I and II, the circumstances of their advent and rise in the tract have been described. In the paragraphs that follow, an account is given of their social customs and culture.

Kallars.—

The Kallars form the district's most numerous community. Part of the 'Mukkulattor' or the 'three-some', namely, the Kallar, Maravar and Agamudayar, these three groups along with the Pada-yachis, are among the largest cultivating groups in Tamil Nadu. While the Padayachis or Vanniyakula Kshatriyas are the predominant cultivating group in the northern districts of Chengalpattu, North Arcot, South Arcot, Salem and to a lesser extent, Thanjavur and Coimbatore, the Mukkulattor are numerically stronger in the old Pandya region, namely, the Tirunelveli, Madurai, Ramanathapuram, Tiruchirappalli and Pudukkottai districts. The Mukkulattor, however, did not start off as cultivators. According to tradition, the three-some formed "a strategic section of the armies of the Tamil kings in olden days when fighting was an even more important profession than agriculture and supported a larger population."² The Kallars and the Vanniyars constituted the Pallava Army and later the Chola army, after the eclipse of the Pallavas. The Maravars a more southern tribe and not known

¹ For the several welfare measures that are being undertaken for the welfare of the Harijans, please see chapter XVII—'Other Social Services'.

² See *Report of the Backward Classes Commission*, Tamil Nadu Volume II. (1971).

north of the Kaveri were all the time Pandya forces. The Agamudaiyars were, as the name indicates, palace guards or kings guards. They come to be called Mukkulattor. The three groups, though akin have led a separate existence without inter-marriage. F. S. Mullaly of the Madras Police has observed: ¹ "The origin of the Kallar caste, as also that of the Maravars and Ahambadayars, is mythologically traced to 'Indra' and 'Aghalia', the wife of Rishi Gautama. The legend is that Indra and Rishi Gautama were, among others, rival suitors for the hand of Aghalia. Rishi Gautama was the successful one; this so incensed Indra that he determined to win Aghalia at all hazards, and, by means of a cleverly devised ruse, succeeded, and Aghalia bore him three sons who, respectively, took the names Kalla, Marava and Ahambadya."

The above account is significant as an indication of the pride which the Mukkulattor take in their ancestry whatever be the status assigned to them by society over the centuries. Edgar Thurston gives² another version of the legend: "Once upon a time Rishi Gautama left his house to go abroad on business. Devendra, taking advantage of his absence, debauched his wife, and three children were the result. When the Rishi returned, one of the three hid himself behind a door, and, as he thus acted like a thief, he was henceforward called Kallan. Another got up a tree, and was therefore called Maravan from maram, a tree, whilst the third brazened it out and stood his ground, thus earning for himself the name of Ahamudeiyan or the possessor of pride. This name was corrupted into Ahambadiyar. There is a Tamil proverb that a Kallar may come to be a Maravar. By respectability he may develop into an Agamudaiyar and by slow and small degrees, become a Vellala, from which he may rise to be a Mudaliar." It however seems to be logical that it is Maravar (மறவர) and மரவர் மற in Tamil means 'Wari'. Similarly Ahamudayar means who looks after the house hold (Akam). Akam (அகம்) in Tamil means house.

In an account³ of the *Various Tribes of Cullaries in the Countries of Madura, Shevagunga and co.*, written in 1817, T. Turnbull, a Surveyor of the East India Company, says; "The Maloor

¹ *Notes on Criminal Classes of the Madras Presidency* (1892).

² *Castes and Tribes of the Southern India*, (1909).

³ *Geographical and Statistical Memoir of the Province of Madurai and Dindigul*, Volume III, (1895).

Naud which takes its name from Maloor is situated about 16 miles east of Madura on the [high road leading to Trichinopoly and bordering on Mullaucottah Naud of Shevagunga on the East; the Maloor Naud contains the Vellaloor and Serrugoody Naud and has ever been recognized by the Title of Allagar Naud, or the desert or country of Allagar Swamy. This Naud was originally inhabited and cultivated by Vellaulers without intermission. At a certain period some Cullaries belonging to Vella Naud in the Conjeevaram District proceeded thence on a hunting excursion with weapons consisting of short hand pikes, cudgels, bludgeons and curved sticks¹ for throwing, and dogs. Whilst engaged in their sport, they observed a peacock resist and attack one of their hounds. The sportsmen not a little astonished at the sight declared that this appeared to be a fortunate country, its native inhabitants and every living creature naturally possessed of courage and bravery. Preferring such a country to their Naud in Conjeevaram, they therefore were desirous of establishing themselves here as cultivators. To effect this they insinuated themselves into the favor of the Vellaulers and engaging as their servants, were permitted to remain in these parts whither they in course of time, invited their relations and friends, and to appearance conducted themselves faithfully and obediently to the entire satisfaction of the Vellaulers and were rewarded for their labour. Sometime afterwards the Vellaulers exercising an arbitrary sway over the Cullaries, began to inflict condign punishment for offences and misdemeanours committed in their service; this stirred up the wrath of the Cullaries who gradually acquired the superiority over their masters...so that in process of time the Cullers not only reduced them to poverty, but also induced them to abandon their villages, and hereditary possessions, and to emigrate to foreign countries; many were even murdered in total disregard of their former solemn promises of fidelity and attachment. Having thus implacably got rid of their original masters and expelled them from their Naud, they became the rulers of it, and denominated it by the singular appellation of Tun-Arrasa-Naud signifying a forest only known to its possessors—in short these Cullaries became so formidable at length as to evince a considerable ambition and to set the then Government at defiance". Palayakars in the

¹ See Chapter I and II.

seventeenth and eighteenth centuries were, apparently, so ineffective in controlling the Kallar bands that they suffered them to pass unobstructed. Whenever a Palayakar sought to exercise authority over them or to demand tribute from them, the Kallars would retort by saying that the heavens supply the earth with rain, the cattle plough and they themselves labour to improve and cultivate the land and that when such is the case they alone should enjoy the fruits of agriculture and stand in no obligation to be obedient to or pay tribute to their equals. Turnbull speaks of an incident that brings to mind the early treatment by white settlers in America of American Indians. It occurred in the reign of Yusuf Khan, 'renter' of Madurai and Tirunelveli:¹ "The Nabob was employed nearly for five years in reducing several of the refractory Polligars of Tinnevely to obedience, until that period the Collieres continued in their turbulent spirit of opposition without acknowledging allegiance to the Nabob. It was therefore determined to reduce the Maloor Naud to obedience, for which purpose the Nabob sent a detachment under the command of Captain Rumley consisting of 5 Battalions of Native Infantry and 1500 Cavalry. This force encamped at Maloor and after a fortnight the Nattars were summoned by Captain Rumley, but they would not appear and continued to manifest their licentious character, and contemptuously slighted the detachment; Captain Rumley in consequence marched to Vellauler Naud, and having caused the village to be surrounded, he required the principal Nattars to surrender, but as the whole of the Collieres persevered and were preparing for hostility, using insulting languages and brandishing their weapons within the hedge that surrounded the village, Captain Rumley ordered the hedge to be set on fire which soon communicated to the houses and the conflagration became general. The Collieres sallied out to save themselves from the flames, when the Troops and Cavalry attacked all that ventured out, and killed them without regard to sex or age. It is said that about three thousand men, women and children were slain on that day, several of the principal Nattars were made prisoners and brought to Maloor. Upon this alarming example, the head people of the other villages appeared in a peaceable manner with Woolapas, and submissively

¹ Yusuf Khan was loyal to the East India Company until 1763 when he declared a rebel by the Company, and put to death.

did homage to Captain Rumley on his march back with his prisoners to Maloor." Turnbull informs us that after this orgy, "Captain Rumley became the terror of the Collieries Naud and was highly respected and revered by the designation of Rumley Swamy under which appellation the Collieries afterwards distinguished him". Rumley's treatment of the Kallars was savage by any standards. General Dyer's action at Amritsar in 1919 pales before it.

The Kallars derived a regular income from other people in two ways; one, by means of the *tuppu-cooly* system. This involved cattle being stolen by Kallar bands and being returned to their owners through a Kallar intermediary on payment of about half their value; two, by means of the *Kaval* system by which the Kallars obtain from villagers a certain fee as an insurance against theft. This arrangement forced villagers to accept the *kaval* or protection so as to avoid a continuous loss of property by Kallar house-breakings and thefts. Attempts by villagers to resist the exaction of these fees were met by an epidemic of thefts and house-breakings. But when a village accepted Kallar *Kavalgars*, that village was exempt from the operation of any of the Kallar gangs and if any crime occurred within its limits, the lost property could be recovered from such a gang through the mediation of these *kavalgars*. Predictably, villagers belonging to other communities in these tracts developed a dislike of the Kallars and whenever they could manage to catch a Kallar in the act, they would beat him up unmercifully and sometimes even kill him. In the late nineteenth century an anti-Kallar movement, in fact, arose in the Madura district and Kallars were driven from different localities by the various inhabitants of these areas.

While Kallars have in the past had a tradition of cattle-lifting, dacoity and murder, agriculture has become their main occupation now. But in their practice of agriculture also, a hardihood of body and will, has marked them out from the rest of the farming populace.

It was, apparently, in realization of the fact that no community can be branded as criminal for ever that in the 1920s, the Madras Government initiated a series of measures designed to rehabilitate

the community's status. In an official note¹ issued in 1921, the Government said : "The majority of the caste are honest men, many of them are men of status, one at least is a ruling chief.² But it is a fair generalization to say that the ancestors of the Kallars led adventurous lives, that the adventurous spirit is sometimes a source of trouble to their neighbours. The chief difficulty is the fact that many Kallars do not consider it in any way wrong to commit a crime. The successful criminal is a hero and is considered a most eligible bridegroom by the girls of his village. In some villages, a Kalla youth has to commit crime in order to prove himself a man. After such a feat, he is regarded by the other youths of the village in the same way as junior school-boys in England regard the boy who has been given his 'first eleven colours'. The spirit of emulation in crime brings more recruits to crime than the Police can deal with. It makes little difference to a Kalla's popularity whether he gets convicted or whether he escapes. Any Kalla convicted three or more times is looked on rather as a martyr ; and his family is given every assistance while he is in jail." As a result of this awareness the then Madras Government introduced a scheme whereby it was sought to rehabilitate the community reputation and improve its moral and economic status. The programme,³ included the application of the provisions of the Criminal Tribes Act, 1911, to Kallars in some villages in the taluks of Tiruchirappalli, Madurai and Ramanthapuram districts, which involved the registration of some of the more notorious Kallar men; the spread of cottage industries such as oil-pressing, mat-making and cloth weaving among them ; the giving of contracts to Kallars for road metal ; employment in factories and tea-estates the conditional grant of waste agricultural land to them ; and the sending of Kallar children to schools so as to divert the ambitions of coming generations of Kallars from crime. The then Government noted that the Kallars " represent both physically and mentally some of the finest human material available in South India " and hoped that with patience, perseverance and sympathy its efforts at Kallar reclamation may attain a large measure of success.

¹ Based on a Report from a B B Loveluck superintendent of Police, The note issued from the Government Publicity Bureau Tamil Nadu Archives records,

² The Tondaiman ruler of Pudukkottai.

³ Described in the 1921 note,

The Criminal Tribes Act, 1911, brought within its fold many communities, apart from the Kallars. The Act was introduced in the Pudukkottai State by the Regulation No. 1 of 1916.

The (Second) Criminal Tribes Act, 1924, was introduced to control the members of the criminal tribes both individually and collectively. This Act was amended in 1943 and again in 1945. The object of these amendments was to stiffen the original Act in certain respects. The Madras Restriction of Habitual Offenders Act, 1943, provided for the application of the provisions of the Criminal Tribes Act, 1924, to individual habitual offenders also. It was revised in 1948 with the object of having a single Act to control the activities of individual habitual offenders, whether they were members of a notified tribe or not.¹ This revised Act and the Criminal Tribes (Madras Repeal) Act, 1947 came into force on 2nd September, 1948, thereby removing the indignities the people of these tribes had suffered for several decades. Thereafter, these tribes came to be known as Denotified Tribes.

Kallar reclamation, however, dates back to 1920 when the scheme was introduced in Madurai district for Piramalai Kallars. In the Pudukkottai State also, a reclamation school for the criminal tribes was started at Tirumayam on November 23, 1925.² As regards this school, Pudukkottai Darbar observed in 1925-26 : " Arrangements have been made to teach weaving.... The pupils are given free board, clothing and lodging. The school life is producing remarkable change in the character and outlook of the boys and it is the opinion of the government that the education of the boys of the members of the criminal tribes is the surest way to reclaim them.... "

The entire work relating to the reclamation of all criminal tribes, excluding the administration of Criminal Tribes Settlements, was transferred to the Department of Harijan Welfare with effect from 1st September 1949³.

The hopes for Kallar reclamation have been justified. The old turbulence is now a thing of the past although the Kallars are still a high-spirited people. Economically, however, they still

1. Tamil Nadu Archives records.

2. See Chapter XII

3. Tamil Nadu Archives records.

have a long way to go. They do not occupy, in the agricultural field, the status of large land-owners. And when they are not in agriculture, they generally engage in labour of some form or the other.

The Kallars in Pudukkottai district have several sub-sects which are known after the village or nadu from where they originated. These include the Ambu nadu¹ Kallars who are concentrated in and around the village of Ambukkovil in the Karambakkudi area and claim among its members the former ruling family of Pudukkottai; Vallanadu Kallars who are found in villages around Tiruvarangulam; the Sengattu nadu Kallars of Alangudi taluks; the Visenignaud Kallars residing in the tract north of Kulattus; east of Perambur, west of Gandharvakkottai and south of Budalur; and the Therkathi or Unjainadu Kallars who are found mostly in Tirumayam taluk such as Perungudi, Rayavaram, Arimalam, Pilivalam, Tekkattur, Tulayanur and in villages of Kulattur taluk such as Pakkudi, Parambur and Nangupatti.

A very notable feature of Kallar 'material culture' is the Kallar boomerang called the valai tadi or valari meaning curved stick.

The Government Museum, Pudukkottai, has in its collections, some valai tadis made of wood and iron. These once belonged to the collection in the Pudukkottai Old palace armoury. Specimens of the valai tadi have been found among iron implements in the megalithic burial sites of Pudukkottai and a few such excavated specimens are now exhibited in the museum. The object has clearly been in use through centuries. A late Tamil inscription from Virachilai (Tirumayam Taluk) referring to a compact among different classes of people at the end of their feuds, records that if a man were to be killed by the throwing of a stone from a sling or by a valai tadi, the offender should be caught and put to death. Old pallava dwara palaka sculptures show crescent shaped objects on the backs of their heads which are probably valai tadis. A demonstration of the throwing of these curved sticks was witnessed by Grant Duff, Governor of Madras, during his visit to Pudukkottai in February, 1886.

1. K.R. Srinivasan informs that Ambunedu is a corruption of the old Tamil Name Alumbilnadu and that Visenginadu is a corruption of misengilnadu

Thurston quotes¹ the then Diwan of Pudukkottai on the subject as follows : " The valari or valai tadi is a short weapon, generally made of some hardgrained wood. It is also sometimes made of iron. It is crescent-shaped, one end being heavier than the other and the outer edge is sharpened. Men trained in the use of the weapon hold it by the lighter end, whirl it a few times over their shoulders to give it impetus, and then hurl it with great force against the object aimed at. It is said that there were experts in the art of throwing the valari, who could at one stroke despatch small game, and even man. No such experts are now forthcoming in the State though the instrument is reported to be occasionally used in hunting hares, jungle fowl, etc. Its days, however, must be counted as past. Tradition states that the instrument played a considerable part in the Poligar wars of the last century. But it now reposes peacefully in the households of the descendants of the Kallar and Maravar warriors, who plied it with such deadly effect in the last century, preserved as a sacred relic of a chivalric past along with other old family weapons in their puja room, brought out and scraped and cleaned on occasions like the Ayudha Puja day when worship is paid to weapons and implements of industry, and restored to its place of rest immediately afterwards ". Thiru Rajamahomed, Curator Government Museum, Pudukkottai in a note, states that valai tadis were carried by the old warrior stuck in their knotted tufts for being drawn out with agility whenever required for use. Radhakrishna Aiyar describes² the boomerang as measuring 24 inches in length along the outer curve, the chord of the arc being about 18 inches. He states : " We know that the weapon was used to injure and kill men in the 14th and 15th centuries. A peculiarity of the boomerang is said to be that, when thrown, a whirling motion is imparted to the weapon, which causes it to return to the place from which it was thrown." The Kallars are associated with this object in all written accounts on them. The use to which the stick has been put include robbery and hunting. The Kallars and their sister-community, the Maravars, are one of the rare, if not the only community in India associated with a boomerang. Australia, has, of course, been recognised as the original home of the boomerang. Although it is not known when the boomerang first appeared in Australia

1. *Castes and Tribes of Southern India* (1909)

2. *A General History of the Pudukkottai State* (1916) by S. Radhakrishna Aiyar.

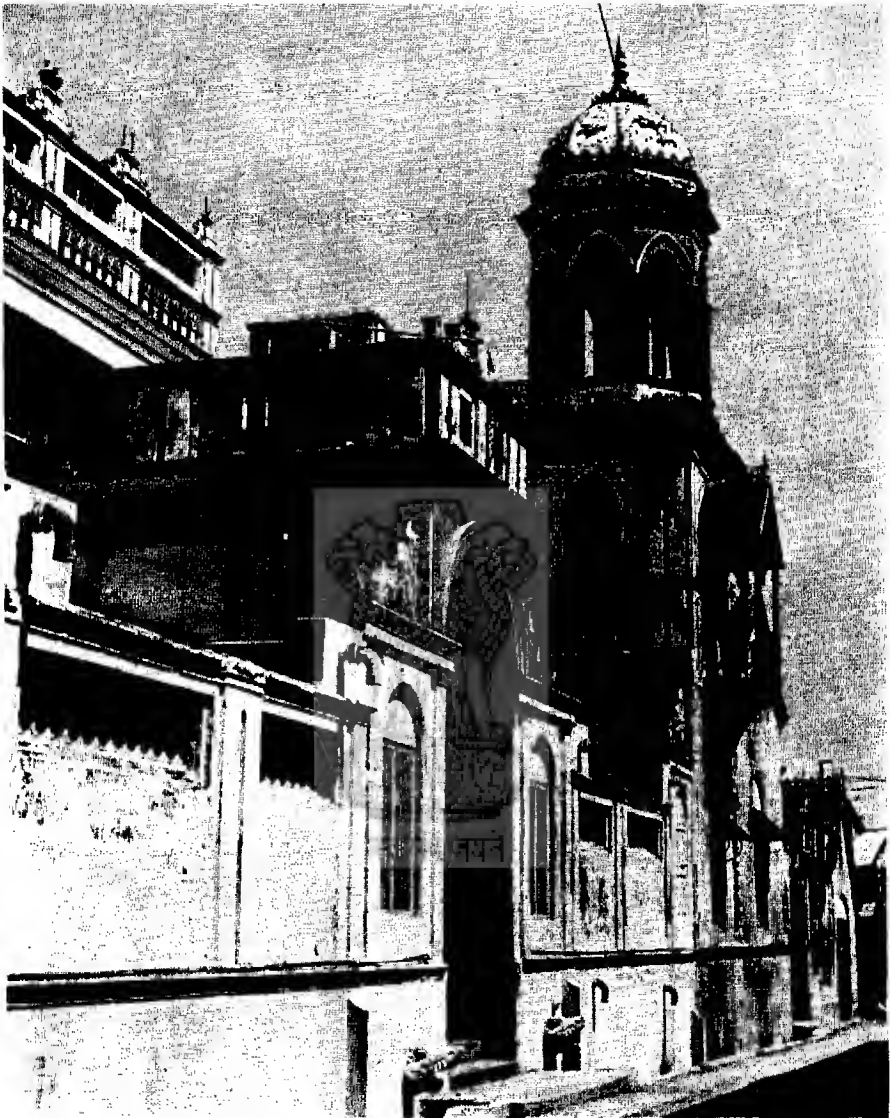
recent¹ dating has given a date of 9,000 years. Throwing sticks have, apparently, been known in ancient Egypt, parts of America and Africa, apart from Australia and India. In an article entitled 'Is the Boomerang Oriental', in the *Journal of the American Oriental Society* (1935) D.S. Davidson says on the question of the ability of boomerangs to return: "Since the middle of the nineteenth century Europeans seem to have been trying to make certain Indian weapons return. As early as 1869, Lane Fox illustrated certain curved, pointed weapons, elliptical in cross-section, which in general respects are comparable with some of the Australian ordinary boomerangs. Aside from the fact that they are heavier and thicker than the latter, have surfaces equally convex, and apices at the extremities of the convex sides, they are stated definitely not to return. The crudest are said to come from Goojerat and an "improved form" from Madras. The latter is a short, curved weapon with a knob handle. Subsequently in 1872 the same writer, in attempting to show a historical relationship between the Australian and Indian weapons, remarked: "The Dravidian boomerang does not return like the Australian weapon. The return flight is not a matter of such primary importance as to constitute a generic difference, if I may use the expression; the utility of the return flight has been greatly exaggerated: it is owing simply to the comparative thinness and lightness of the Australian weapon (sic)." In 1877, however, Lane Fox after considerable experimentation announced: "An improved form of this weapon is used by the Maravars of Madura, and some of these are much thinner than the boomerangs of the Kolis, and in practice I find them to fly with a return flight like the Australian boomerang." This is the statement that seems to be the basis for the recent claims, referred to above, that a 'boomerang-shaped instrument' in India can be made to return. It seems quite certain that Lane Fox was not making the implication that returning boomerangs were in use but merely stating that by experimentation with certain specimens he was able to obtain what he regarded as a flight comparable with the flights made by Australian returning boomerangs. However, he does not define

1. Communication from Jeanne d'Espelssis, Graduate Assistant, Department of Anthropology, University of Western Australia, Perth dated February 5 1975

what he means by the term "return flight". At last, in 1883, he seems to have accepted as a fact that these weapons as a class and in their aboriginal use were neither intended to return nor capable of being made to return. The most recent detailed attention to these Indian weapons is a study by Hornell. He finds them to be in use among Maravans and Kallans, Vellalas, Valliyans, Nadars (Shanars) and Muhammadas in Madura, Ramanathapuram and parts of Tanjore, Tinnevely and Pudukkottai. In some cases, they were used for hunting hares, deer or partridges; in others, they were considered of as weapons of war. At the present time many have ceremonial values and are made of ivory or steel. In no case did Hornell find any evidence of return flight." In a note furnished by the Curator, Government Museum, Pudukkottai, he has observed quite definitely, that unlike their Australian prototypes, the *Valai tadis* are of a non-returnable type. It is possible that the latter are examples of boomerangs of a very primitive type, while those of Australia are of an advanced type of construction.

Nattukkottai Chettlars.—The Chettiars—or, to be more exact, the Nattukkottai Chettiars—are a very important and interesting community, who have played a no inconsiderable part in the life of the Tamil Country. Their origins are lost in the mists of antiquity but the generally accepted theory is that, somewhere about the second century, they migrated from Kaveripoompattinam near Mayuram, and settled in ninety-six villages granted to them by the then Pandya sovereign and so came to be known as the nagarathars¹ (townsmen) of ninety-six villages. The *Madura Manual* (1868) refers to the derivation of the word Nattukkottai as follows: "The word Nattukkottai is said to be a corruption of Nattarasankottai, the name of the small village near Sivaganga. But this derivation is doubtful." According to Thurston the name is usually said to be derived from *nattukottai* (country fort).

¹ K.R. Srinivasan writes: Nagaram according to the evidence from inscriptions particularly relating to the South Indian Merchant/Trade guilds from the 7th century onwards stood for one of the various kinds of Mercantile Centres: Nagaram Manigramam etc. As merchants par excellence, they were members of the Nagaram guilds and hence 'Nagarattar' those of the Nagaram. Narttamalai was a Nagaram and the inscriptions there are full of the names of persons with the title Silai Chetta. Kodumbalur was a Manigramam.



A Nattukkottai Chettiar house in Ramachandrapuram Pudukkottai district

Photo : M. Krishnan

They had nine major temples¹ apart from the smaller shrines which they built in their villages. The temple was the centre of their universe and no important event, communal or individual occurred without worship of the local deities. The Chettiars were traders by profession and went about the country on foot or in bullock-carts selling rice, salt, clothes and other commodities. They were — and are—pious and god fearing and habitually devoted a portion of their earnings to charitable purposes. They are devout Saivites and many of the male members of the caste wear a rudraksha, usually set in gold, round their necks².

They were not a home-staying folk. They were in business in Ceylon even during the Dutch occupation of the Island and when the British took over and with the increase in export of coffee, their financial activities rose steeply. About the middle of the nineteenth century they took to trading beyond the seas. The opening of the Suez Canal gave them their chance. There was an increasing demand for Burmese rice and teak but Burmese economy was not equal to meeting it unaided. The Chettiars decided to step in, went to Burma and started money-lending, which brought great benefits to the country—and, of course, to themselves.

That was only the beginning. The appetite came with the eating. They ventured further afield, established business in Malaya and the Far East, where they came to own land, houses and rubber estates or plantations. They played an important role in Malaysian finance. They handled the opium trade to a large extent, had extensive dealings with the Chinese merchants, whose financial soundness they were quick to perceive. The Chettiars earned considerable profits and, what is more, in Compton Mackenzie's words "maintained the reputation" won by them elsewhere "of being businessmen of shrewdness and integrity". Equally handsome was the tribute paid to them by Sir Harcourt Butler who, as Lieut-Governor of Burma in the late nineteenth-twenties had unrivalled opportunities of judging the place they occupied in the Burmese economy. "The Burman today is a much wealthier man than he was twenty-five years ago and for this state of things the Chettiars deserves his share of thanks. I feel

1. Elayathukudi, Nemam, Mathur, Vairavan, Velangudi, Iluppaikudi, Suraikudi, Pillayaripatti, Iranyur

2. *Castes and Tribes of Southern India 1909* by Thurston. Volume V. page 251

confident that the Chettiar will always hold his own and prove himself in the years to come as he has done in the past, the real backbone of the Banking System throughout the Province".

In their prosperity they did not forget their fellowmen. A portion of their profits they set a part for charity, which expressed itself in the building of temples, schools, rest-and-feeding houses, excavations of drinking water ponds, and rearing of flower-gardens. What was more, they far-sightedly made ample provision for efficient management of their foundations. In recent years their eleemosynary activities have taken a new turn. Colleges and hospitals have been established. The most outstanding instance of their beneficence is the Annamalai University, founded by Rajah Sir Annamalai Chettiar. Another instance is the complex of colleges at Karaikudi (Ramanathapuram district) founded by Alagappa Chettiar which in its composition is almost a university.

The Chettiars are a closely-knit community and, in all matters of common concern, are governed by custom which has crystallised into rules, which are faithfully observed. Every village has its guild, every family its vote¹, and decisions are reached which command the Community's unquestioning acceptance.

Chettinad, the home of the Chettiars, is largely in the Ramanathapuram district, on the Coromandel Coast or within reach of it. Its frontiers straggle across three districts, Madurai, Ramanathapuram and Pudukkottai. There are about 20 villages in Pudukkottai, south of the Vellaru, the traditional boundary between the Chola and the Pandya kingdoms and there has always a lively intercourse between Chettiars on both sides of the border.

While undeniably pious and tireless in giving to charity they are keen men of business. They know both sides of the family rupee to a nicety, and can make one rupee go the way of ten and come back a hundredfold. They rarely fail in business and when they do, the community helps them to retrieve the situation and set them again on their feet.

¹ A husband and wife are one *pulli* (unit) for voting purposes,

Their piety is in evidence at every turn. Their lives are punctuated by family and caste festivals. They marry early—at all events, they used to until very recently—and while not sparing of expense, manage to add to the family exchequer. Costly presents are made to the bridal pair, jewels for the bride, of gold and diamonds, emerald and sapphire, along with a substantial money endowment known as '**stridhanam**', that is, women's property.

Nor is the bridegroom forgotten. He is given a substantial amount as bridegroom-price at rates which have now risen to giddy heights. And the Chettiars, wise in their generation, take precious care that the '**stridhanam**' is not frittered away. It is invested in some reputable firm—in the name of the bridegroom a customary courtesy—and is made payable to the order of two persons related to the parties, one on the bride's side and the other on the bridegroom's. It is really in the nature of a provision for a rainy day or a succession of rainy days. One of the presents is the '**kazuthiru**', a heavy necklace of gold with the customary emblems of wifehood strung on to it. That again is a provision for use when times are hard. However, as it is too heavy for daily wear, a simpler symbol (*Sirutali*) serves the purpose.

The Chettiars are a canny folk. They believe in propitiating the bridegroom's mother and the best way to do this is to make a sizeable money gift to her in order to keep her in good humour. It is worth noting that while '**stridhanam**' is given to the bride by her parents, the bridegroom's family make a contribution to it, which is called '**idupon**'. Sundry presents to which all relations contribute are made during the four days of the marriage which are all added up and invested. Thus the happy couple are launched on their wedded life in foolproof financial security. The presents include every article which a household may require—vessels of silver and brass, and latterly of porcelain and more recently, ever-silver, beds and bedding, and stores for a year's consumption. While mindful of money they do not forget the social side. There is a good deal of merry making and concerts by renowned artistes are arranged. The bridegroom dresses up in clothes of lace and gold, wears necklaces and an elaborate silk turban suitable to adults. A curious custom is that the *tali*, duly consecrated, is tied round the neck of the bride by an elderly relative

who is believed to possess the lucky touch. The ceremony used to take four days but now is compressed into one, a sign of the changing times. Changes there are in plenty but not in the size of the gifts to the bride and the bridegroom, which in fact keeps increasing.

Chettiars boys are apprenticed to the ancestral business from the time they leave school. Nowadays they receive a modern education but until the first quarter of the present century they had to memorise old-time rules of calculation. Then they were sent abroad to serve in firms and generally be linked into shape so that they acquired a thorough mastery of accounts. Agents were sent out to serve in firms for a period of three years, on a fixed salary, of which they received a part—usually a third—on joining, and the balance when they returned home at the conclusion of their agency and rendered accounts to the satisfaction of the principal. Their first duty on landing was to go direct to their principal's house stay there for a few days and then only go to their own homes. Those who were slack and had bungled the business got short shrift at the hands of their principals. But those who did well were given a bonus which varied from five to ten per cent of the profits. The agents then spent three years at home and then returned to the firms for another spell of three years. If they did not, they had to return half the bonus they had received. On the whole, principal and agent strove to maintain their connection as long as possible. Successful agents often set up businesses of their own.

Chettiars had a strong sense of family. Even as they are keen on earning, they are keen on having sons. Sonlessness is a stigma which is removed by adopting a son. That is enjoined by the scriptures, for a son is supposed to save the father from the tortures of Hell. And adoption, in its turn, brought financial benefits. It helped to keep the family fortunes in the family, at the same time, the natural father of the boy to be adopted made a profit. He was given a substantial money compensation for parting with a son. Adoptions generally worked, sometimes they led to frictions. In all the major transactions of life the Chettiars execute what are called 'muris' (agreements). When marriage is settled there is a 'muri' known as 'Esackadimanam', where, after a long preamble invoking the aid of Heaven, the high contracting parties

are described with great particularity and the fact of the arranged marriages recorded with great solemnity. Similarly, when an adoption takes place, a 'muri' is executed recording the details of the adoption—the giving and taking — and the transfer of the rights and duties of the maternal uncle from the family which gives to the family which takes. One interesting custom regarding succession to 'Stridhanam' is worth recording. If the 'Stridhanam' holder (that is the wife) dies childless, the 'Stridhanam' reverts to the donors. The cash given by her husband's family goes back to them—of course with all the accumulated profits. This custom is a variant of the Hindu Law under which the husband would inherit.

Contracts of agency are similarly evidenced by 'muris' drawn up according to custom.

Chettiar accounts are detailed and accurate and a faithful picture of money transactions, rather involved, as they insist on going into details, but clear-cut all the same. The double-entry system they follow called 'pathu-varavu kanakku.' The old order is crumbling and new patterns of life are evolving. Chettiars move with the times. They go into new types of business and bring their astuteness into play in running them.

The Chettiars have played an honourable part in South Indian life and they may be relied on to do so in the changing conditions which are fast supersiding the old¹

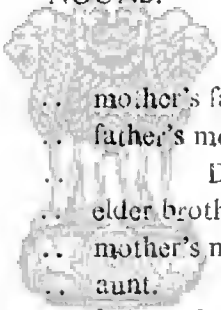
¹ For the above paragraphs on Nattukkottai Chettiars, we are grateful to K. Nagarajan, author and lawyer, of Pudukkottai.

LANGUAGE.

Tamil.—The mother-tongue of over ninety per cent of the district's population is Tamil. The Department of Linguistics, Annamalai University, made a special study in May-June, 1975, for the Pudukkottai District Gazetteer of Tamil as spoken in Pudukkottai District, so as to study regional linguistic uses. It interviewed local communities in Pudukkottai town, Tirugokarnam, Tharayam, Kovilpatti, Arnavasal and Arantangi. Apart from ascertaining detailed phonetic, grammatical and phonological uses it also made a study of the lexical uses of Tamil in the area. The region was found to employ the following terms :—

NOUNS.

Kinship Terms.—



appacci	..	..	..	mother's father.
appayyi	..	..	..	father's mother.
apputta:	..	..	..	Do.
attacci	..	..	..	elder brother's wife.
ammaiyi	..	..	..	mother's mother.
ayte	..	..	..	aunt.
ayya:	..	..	..	father's father
atta:	..	..	..	elder sister.
mayan	..	..	..	son.
mayi (1)	..	..	..	daughter.
cittappa:ru	..	..	..	father's younger brother.

Games—

e nukkattu	..	..	..	a kind of play-bull catching.
e nukkarsu	..	..	..	a gambling (playing cards).
nikkottu	..	..	..	name of a game.
pullasi	..	..	..	kabadi.
pu: amale	..	..	..	name of a game.
ottamka:	..	..	..	a play for the girl.
kitti	..	..	..	name of a game (boys).
kutareccillu	..	..	..	Do.

Local items.—

iro:piyan leñli	..	..	European lady.
baṣṣkar	..	..	a servant category in the Pudukkottai State (Peishkar).
dominiyan	..	..	Dominian.
sukkaṛ	..	..	Government.
śarvasaṁam	..	..	(Pudukkottai) State.
śaṣṭar	..	..	a servant category (Shrivistadar of the Collector's office).
śiṣu	..	..	suicide.
śeṭṭ	..	..	same.
merjer	..	..	merger.

Other nouns.—

anūñal-veruntal	..	..	dry period.
anmankatsu	..	..	coin issued by Maharaja of Pudukkottai.
anpattayyam	..	..	barber.
ṁṁavaṛom	..	..	wheel remover.
ṁṁṁ	..	..	date palm.
offom	..	..	distant.
perukku karlam	..	..	rainy season.
poṣaku	..	..	mistake.
prameyam	..	..	auspicious occasion.
poṭṭal	..	..	ground.
pinje	..	..	dry land.
poṛcuṭṭu	..	..	name of a (the main) part of the deck.
poṛaṭi neṭu	..	..	second crop.
poṛyam	..	..	garnery.
poṛkkuṭi (or kaṇṇikū).	..	..	name of a festival (kūṇṇikū).
poṛṁṁṁṁṁṁṁ	..	..	wed lock (tali-marriage badge).
poṛṁṁṁṁṁṁṁṁ	..	..	maize corn.
poṛṁṁṁ	..	..	enquiry.
poṛṁṁṁ	..	..	near.
poṛṁṁṁṁṁṁṁṁ	..	..	purposeful.
poṛṁṁṁṁṁṁṁṁṁ	..	..	lake.
poṛṁṁṁṁṁṁṁṁṁ	..	..	canal.
poṛṁṁṁṁṁṁṁṁṁ	..	..	spoke.
poṛṁṁṁṁṁṁṁṁṁ	..	..	war-dress.

kuṭṭakkoṭi .. ..	.. ..	flag hoisted in the temple premises.
keṭam .. ..	.. ..	death.
kukkore .. ..	.. ..	thrice appealing to the panchayat.
maccu .. ..	.. ..	ups-tair.
mukkom .. ..	.. ..	corner.
naṭṭupari .. ..	.. ..	seedling transplanting.
nukkuṭole .. ..	.. ..	tender kernel of palmyra.
neṭi .. ..	.. ..	pit.
naṭṭuk ē .. ..	.. ..	transplanting area.
saṭṭakutru .. ..	.. ..	a type of climbing.
sonku .. ..	.. ..	husk.
saṭṭpu .. ..	.. ..	a type of hut.
sonanku .. ..	.. ..	laziness, delay.
lakku .. ..	.. ..	direction.
vellane .. ..	.. ..	early morning.
vettalaṭṭu .. ..	.. ..	leaves of nut, betel and nuts.
vaṭṭapattu .. ..	.. ..	lease.
vlaṭ .. ..	.. ..	a part of plough land.
vati .. ..	.. ..	mud.
vaṭṭiku .. ..	.. ..	non-Tamil language.
roṭṭe .. ..	.. ..	cart-wheels
raviṭṭi .. ..	.. ..	night-time
yoṭṭaṭṭu .. ..	.. ..	astrologer.

Verbs —

paṭṭu .. ..	.. ..	corn shoots out, shoot out, flourish.
paṭṭu .. ..	.. ..	to plant.
paṭṭaivatu .. ..	.. ..	to be together.
toṭṭa .. ..	.. ..	get trodden or mashed.
tiṭṭu .. ..	.. ..	diverse.
kaṭṭikuṭu .. ..	.. ..	to give in wed-lock one's 'daughter'
moṭṭai-kuṭi .. ..	.. ..	drink.
meṭṭy .. ..	.. ..	to heap the straw.
vaṭṭiricciṭṭu .. ..	.. ..	stunted growth, deviate, turn round or move out of straightpath

Particles—

inkane .. ..	.. ..	here.
inkuṭṭu .. ..	.. ..	this side.
ankane .. ..	.. ..	there.

ankuṭṭu	..	..	..	that side.
enkane	..	..	..	where.
enkutṭu	..	..	..	which side.
pelakka	..	..	..	loudly.
kiṭṭam	..	..	..	near.
ka:ṭṭam	..	..	..	quickly.
poṭṭu	..	..	..	instantly or immediately
muṇukkumu				at the slightest excuse or cause.
lavukku	..	..	..	suddenly.

Expressions ;—

etuppane kotuppane	..	..	matrimonial relations.
ettu panratu	..	..	eight day ceremony
periyal:ve:le	..	..	work done by an adult.
takka:mukku	..	..	difficult
kottankayve:le	..	..	masonry work.
kuyyutṭiya	..	..	blind guess perversely.
meṭṭa:ttu:le	..	..	work in the wet land.
ma:ṭu avukka	..	..	grace the cattle.
vaccipe:caratu	..	..	hiding certain thing in speech.
varisa:rippo:ṭtu	..	..	tax levy for the village functions.

No grammatical feature was exclusively found to occur in the speech of Kallar social group. That is, it was found to share all the grammatical features with those speech varieties of other social groups of the area. This is a notable feature in the linguistic structure of Pudukkottai Tamil, because no other speech variety of this area has this type of language maintenance and usage.

However, in the use of lexical items many items are found to occur in this speech variety as distinct items.

enappattu	..	..	relationship.
eṇam	..	..	utensil.
aṭuppaṭi (ke:su)	..	..	case of illicit brewing.
aṇam	..	..	the paddy getting matured.
ala muruku	..	..	an ornament (for ladies).
allo:lam	..	..	irregularity.
aramane	..	..	palace.
arana:	..	..	silver waist band.

arave:	..	..	..	completely.
ayya:	..	..	..	father's father.
a:ppu	..	..	..	ladle.
a:ne	..	..	..	elephant.
a:ram	..	..	..	arland/a jewel.
a:ru	..	..	..	who.
a:mpleka	..	..	..	man.
opputtu	..	..	..	a sweet eatable.
onṇappu	..	..	..	an ornament.
onṇa:kku	..	..	..	unite/gather/mix.
oramoreka	..	..	..	relatives.
uṭa:su	..	..	..	throw away.
uluppe	..	..	..	maternal uncle's gift (also the gift brought by serfs to the landlord for the Pongal festival).
u:ta:le	..	..	..	through (something).
u:ru	..	..	..	4th to their kinsmen.
pe:yam	..	..	..	a granary.
panca:yam	..	..	..	village panchayat.
paṇṭe	..	..	..	old.
panteka:lam	..	..	..	olden days.
paḷiyanji	..	..	..	a game
paḷlinkicci	..	..	..	a game
pa:va:sam	..	..	..	sweet gruel (payasam).
ponku	..	..	..	cook (rice).
poṇṭi	..	..	..	wife
poṇṇa:ti	..	..	..	Do.
pontuka	..	..	..	Women.
pomplea:luka	..	..	..	Do.
posalu	..	..	..	stormy wind.
poṭṭi	..	..	..	a granary-basket, box.
po:tu	..	..	..	time/sun.
puti mannu	..	..	..	a token of surety to the potter.
pu:ti	..	..	..	an ornament.
tiruppu:tt:atu	..	..	..	to tie the marriage badge.
tirumankiliyam	..	..	..	marriage badge.
ta:yi	..	..	..	mother.
ta:u:tu	..	..	..	mother's house.
ta:pa:se	..	..	..	dialect.

State (1938) says of the Telugu spoken in the tract that it "is more or less a patois including a number of Tamil words with Telugu suffixes."

The Kurumbars in the district, such as still preserve an identity of their own, speak a kind of Kannada that has a large admixture of Tamil and Telugu words. Marathi and Malayalam have, in the old censuses, been returned by a few persons in the Pudukkottai town.

Saurashtri and the Patnuls of Pudukkottai.—Saurashtri, a dialect of Gujarati, is the language of the silk-weavers or Patnulis settled mostly in Tiruvappur. The Department of Linguistics, Annamalai University, also conducted a special survey of Saurashtri as spoken by the Patnuls in Pudukkottai district for the *Pudukkottai District Gazetteer*. Their report observes "Saurashtri is an Indo-Aryan language spoken by a community known as Patnuli 'silk weavers'. This community has a population of more than a hundred thousand people residing in different parts of Tamil Nadu".

The dialect of Saurashtri presented here is the one spoken by approximately 2,500 people who live at Tiruvappur in the Pudukkottai Municipal area. Besides Tiruvappur, there are a few other villages in the district also where the Saurashtri population is found.

It is said that Saurashtris came from Sorath or Kathiawar, resided in Devagiri and owing to the oppression of Muslim invaders, they migrated to the South, especially to the Thanjavur and Madurai areas in Tamil Nadu during the rule of Nayak Kings. This fact can be established from the internal evidences found in their speech behaviour (Saurashtri) which contains linguistic features found in Tamil as well as Telugu.

Pudukkottai Saurashtri (Tiruvappur dialect) being the mother tongue² of bilinguals, it no doubt, possesses the influence of Tamil, or Dravidian syntactic patterns, lexical items, etc., to a certain extent. It is to be stated here that no monolingual speaker is found in this area.

¹ *Saurashtri Language* (Phonology and Morphology), unpublished M.A. Field Method's report, Annamalai University, 1962; and K.S. Ramasubramanian *A Linguistic Study of Saurashtri Language*, (unpublished Ph. D. dissertation) University of Poona, Poona, 1968.

² K.S. Ramasubramanian, (1968), *A Linguistic Study of Saurashtri Language* (unpublished Ph. D. dissertation) University of Poona Poona.

At Tiruvappar, there are certain living areas where the Sourashtrians live predominantly. Because of this fact, are able to preserve their mother tongue in the environment of the dominant regional language, *i.e.*, Tamil. It is to be mentioned here that they could preserve Sourashtri only through their speech behaviour, because they do not have opportunities to read and write in their own language.

It is said that the Patnuls came and settled at Pudukkottai on the invitation of the then Raja of Pudukkottai specially to make silk garments for the royal family. They had the patronage of all the kings through the years and this enabled them very much to flourish in their silk weaving profession and trade. K.R. Srinivasan remembers: "They are experts in dyeing too, and the dyed lungis, called *Sayavettis* (dyed dhotis), dyed a dull red often with a large border has been the mufti dress (home wear) of the Pudukkottai aristocracy and had a good market outside."

Due to the many advancements in the field of textile industry, handloom weaving is facing a lot of problems¹ and so the Patnuls have now switched over completely from 'pure silk weaving' to 'cotton and artificial silk weaving'. Evidently, their economic condition also has declined to a greater extent. At present most of the Sourashtri families have only very small earnings for their day-to-day living. So most of their families come under low income group. With the exception of a few families, the entire Sourashtri community is found to weave for daily wages. The younger generation, however, is slowly switching over to other professions such as diamond cutting. Some of the younger people who are educated, find jobs in banks, educational and administrative institutions.

It has to be mentioned that if the present state of affairs continues, the Sourashtri younger generation may completely switch over from their traditional occupation to some other profitable occupations like diamond cutting or to 'white-collar' jobs.

The Sourashtri population of Pudukkottai has trade connections with the Saurashtrians of Madurai and matrimonial relations with those in the Tiruchirappalli district. The Saurashtrians are Vaishnavites. All the religions and other social ceremonies are performed

¹ See under Chapter V,

by a priest of their own community and such ceremonies are conducted through Sanskrit in the traditional way.

On the basis of data elicited at Tiruvappur during a field survey, members of the Annamalai team elicited data on lexical terms, verb-noun paradigms, sentence patterns, narrations. Some of the Saurashtri lexical terms are given below :—

modal	..	..	..	capital.
te:n	..	..	..	honey.
ko:ary	..	..	..	Pandar.
katti	..	..	..	knife.
ci:kul	..	..	..	rain.
vari	..	..	..	tax.
vi:d	..	..	..	street.
erakkam	..	..	..	slope.
a:ra:ycci	..	..	..	research.
e:ta:njal	..	..	..	disturbance.
o:narcci	..	..	..	feelings.
a:rambi:ars	..	..	..	origination.
orā ..	..	..	..	fertilizer.
edurpu	..	..	..	opposition.
e:rpa:dl	..	..	..	arrangement.
kalappe	..	..	..	plough.
oppandu	..	..	..	agreement.
ba:ṇḍi	..	..	..	cart.
pillo	..	..	..	child.
pe:na	..	..	..	pen.
pa:su	..	..	..	paisa.
otta:s	..	..	..	help.
kembi	..	..	..	wire.
picce	..	..	..	alms.
kuppo	..	..	..	heap.
gudde	..	..	..	blind.
cevu:r	..	..	..	deaf.
angri	..	..	..	shop.
o:te	..	..	..	similarity.
enam	..	..	..	vessel.
nu:la	..	..	..	corner.
ko:ḍali	..	..	..	axe.

Culture and Arts.

Pudukkottai's Sthala Puranas.—During the Bhakti period, (approximately 7th century A.D. onwards) an attempt was made to 'democratise' the conception of a Supreme Being for the sake of easy accessibility. As the Alvars and Nayanmars increased in numbers, the ascendancy of local pilgrim centres gained in importance to an extent that the whole Tamil country came to be regarded as the 'holiest of the holies'. Instead of a dip at the Ganges one was permitted by religion to bathe in the local temple-tank which, one was assured, was enough to wash off all sins. This helped, perhaps, to satisfy the regional patriotism of the people. The fact that the Supreme Lord had chosen a small town, within the devotee's reach, as His holy dwelling place, touched the devotee deeply. This was one of the reasons for the instant popularity of the Bhakti campaign.

There is, consequently, no village or town in Tamil Nadu, which does not have some religious significance. Religion has flourished in India in the form of regional cults even more than as the basic faith of the race as a whole. This has also been largely responsible for the multiplication of legends in Puranic lore. A willing suspension of the critical faculty is called for, if one wants to appreciate the romantic flights of fancy contained in them. But if one tunes oneself aesthetically to respond to them, one is amply rewarded. The transportation to the never-never lands of gods and goddesses, divine interludes and imaginative history provided by these tales contain much that is of interest and beauty.

The *sthala puranas* of Pudukkottai district are as interesting as any work of this nature could be.

Tirugokarnam, a small town in Pudukkottai district, has been in existence, according to *Sri Dakshina Gokarna Kshetra Manmiyam* for the last 4,320,000 years. It was here that Brahma, 'creator of the universe', was endowed with the creative faculty in the Krita Yuga, the first of the four aeons. Lakshmi, the Consort of Vishnu, was blessed by Her lord at this place in the Treta Yuga. Kapilai, a descendent of Kamadhenu, the Divine Cow, attained mukti, (release) in Gokarnam in the Dvapara Yuga. In the

Kaliyuga, which is the current aeon, this place was worshipped by Vyakkrapatas, Vasishthar and a host of great rishis. Such is the 'historical' importance of this place that even the saints were not tired of hearing all the tales connected with it, over and over again.

One such tale is associated with Brahma. The appellation of 'Creator' is such as can turn any one's head. Brahma, who was apparently no exception to this rule, managed to delude himself into thinking that He was the Supreme Being, but for whom the universe would have become extinct. Now this was not calculated to please the One and Only Lord of the Universe, Siva. The Lord withdrew His Support, the source that sustained Brahma's creative calibre, and soon the business of creation went into complete disarray. The smooth order was disrupted and flocks got multiplied in plenty. Brahma realised His mistake and appealed to Siva for the restoration of normalcy. Then it was that the Lord ordered him to go to Gokarnam and meditate for a number of years to regain His faculty. The very fact that Siva should have chosen this place for Brahma's mortification spoke for the sacredness of this holy town.

Bhudevi (Mother Earth) and Lakshmi are the two wives of Vishnu. Once it so happened that they started quarrelling with each other. In a fit of anger, Vishnu cursed them to be born as human-beings. They appealed to Siva, as the Supreme Authority, to interfere and condone their action. The Lord asked them to worship Him at Gokarnam, and assured them that this devotion would give them back their lost divinity. Lakshmi and Bhudevi reached this holy place and offered their prayers to the two 'lingams' maintained by Kapilamuni and Chandran (the Moon God) respectively. Siva, pleased with their bhakti, permitted them to regain their divinity and even arranged for a repeat marriage ceremony of Vishnu with Lakshmi at Kalyanapuram where He is now worshipped as Bhumisvaran.

Then there is the story of Kapilai, a holy cow. Having wandered all over the earth, it finally settled at Gokarnam to worship Sri Vartana Isar. Kapilamuni suggested to it that it should bring water daily from the holy Ganges to perform the 'Tirumanjanam' (Holy Bath). Kapilai readily agreed. Once while it was on its way to Gokarnam from Kasi, Siva, to test its conviction, took the

form of a tiger and attacked it. The holy cow, which had left its young calf at the cave of Kapila Muni, promised the tiger that it would soon return after fulfilling its two obligations : (1) the performance of Siva puja, and (2) leaving its calf at the temple in the custody of Siva. The tiger agreed to this proposal. The Kapilai, on reaching Gokarnam, led its calf to the temple and prayed to Siva to protect its progeny. Later, after digging the earth on the northern side of the temple, it filled it up with a portion of water that it had brought from the Ganges in its ear lobes (*Karnam*) as a permanent arrangement for the Holy Bath of the Lord. With the remaining water, it performed the *tirumanjanam* and took leave of Sri Varthana Isar to go back to the tiger. Such was its steadfastness in keeping its word. On seeing the cow return, the tiger disappeared and in its place stood Siva, the lord of Kailash, in all His pristine glory. At this place He is worshipped as Vyakresvaran in Tiruvengavasal village two miles to the west of Gokarnam.

These are the tales about Tirugokarnam, a place in which, to stay (let alone perform puja) is as good as never to be re-born. The tanks around the temple are named after those rishis and gods who worshipped Sri Varthana Isar, such as Kapila Tirtam, Mankama Tirtam, Lakshmi Tirtam, Brahina Tirtam and Indira Tirtam. The lord Gokarnesa is also known as 'Vakulesan' and His consort Brihannayaki or Periyamayaki, 'Kalyanasundari'.

Alangudi also known as Kusiaranyam is another sacred town in Pudukkottai district. The presiding deity is Apatcakayan and His consort is Elalagambal. The elephant god, boy of Apatcakayan is called 'Kalarkamarkarta Ganapati' (Ganapati, the Redeemer).

The *Alangudi Sthala Puranam* narrates an interesting story in this regard. Gajasuran, the son of Makatar, a rishi, true to his reputation as Evil Incarnate, broke a mythical wall in the sky as a result of which the Earth got flooded with the waters of the Ganges that came pouring in. The inhabitants of the Earth and Heaven could find no shelter, but to their surprise in their search for refuge, they came across this small town, Alangudi, which not only was not submerged by the floods but, like Noah's Ark, gave protection to everyone that sought it for safety. The waters had stopped

short a distance away from the town. There they (gods and men) stayed and prayed to Siva to give them respite from the innumerable pranks of Gajasuran. Siva asked them to do obeisance to Ganapati, His son instead of to a mere mortal like Gajasuran and assured them that Ganapati would help them. They did as they were bidden and Ganapati came to their rescue by drinking up the flood-water. From that day He came to be known as Kalankamarkatta Ganespati and, as requested by His devotees, settled down at the Southern Gate of the temple in front of the idol of Elalagambal.

The *Alangudi Sthala Puranam*.—narrates yet another story to explain the names of the small towns and villages near Alangudi. Once Sundarar, one of the four famous Nayanmars, was on his way to Alangudi to worship Apatcakayan when a river in floods interrupted his path. He looked around for a boatman Siva, always fond of divine mischief, appeared as one and offered to take the party across the river. After depositing most of the disciples on the other side of the river in the first trip, the boatman took, Sundarar in his second round. As they were gradually proceeding towards the opposite bank, the divine canoeist created a whirlpool in mid-river and the boat, naturally, got stuck. Then he dropped his oar and as if in an attempt to retrieve the same from the water, slipped and fell into the river. The canoe, in the meantime moved far ahead, pushed by the force of the agitating stream. Sundarar prayed fervently to Siva who asked him and the few disciples left with him to hold on to the boat firmly. This particular place is now known as 'Amilutisvaram'. The boat, as it proceeded a little farther, dashed against a rock and broke into fragments. Sundarar and his followers held on to the bits that floated for their dear lives and once again appealed to the Lord to save them. The place where this incident took place is now called 'Dhonipuram'. They began floating in the river helplessly and as they were thrown across a considerable distance, Siva, deciding not to prolong their agony any more, extended His hands towards them, catching hold of which, they reached the bank. As Siva gave His protective hands to save His devotees at this point, the place is now known as 'Kaippattur'. The Lord asked Sundarar and his disciples to go to Alangudi and perform puja for three years, at the end of which period he (Sundarar) would be blessed with 'mukti'. So it was

at Kasiaranyam (Alangudi) that Sundarar attained 'moksha'. Life on this earth is often compared to a voyage on sea by our ancient seers and bards in which God is the only divine Boatman who can steer us across to the other shore. This is stretched into an extensive allegory in relation to the story associated with Sundarar.

Satyashetra, or Tirumeyyam (Tirumayam) is one of the twenty-eight Vaishnava pilgrim centres. This place is also known as 'Venuvanam' (bamboo-forest). The god of Truth is said to have worshipped Vishnu at this forest taking the form of a mountain, called 'Satyagiri', to relieve the earth of all 'asuras'. Adishesan, Garudan, Satya Ma'arishi and Paruravan performed 'tapas' at this place and were blessed by Vishnu.

The spot where Adishesan made a hole to enter the earth was filled with water and is now called 'Sarpanadi' (Pambaru or Serpent River). Vishnu appeared before him as 'Hayagriva' (the horse-faced god) and took him into his fold.

The story of Garuda's worship at this place is fascinating. Kasyapar, a rishi, had two wives, Katru, and Vinatai. They were jealous of each other. Once they had an argument regarding the complexion of Indra's elephant, Iravatam. Vinatai said it was white but Katru maintained it was black. Indra appeared at this time, mounted on his white elephant, and Katru, to uphold her stand commissioned her son, Taksaka to conceal the white colour. In a spirit of triumph, Katru took Vinatai as her slave, which was the bet. Vinatai was badly treated and she appealed to her husband, Kasyapar. He told her that an end to her sufferings could be achieved only through her son. Meanwhile, Katru had promised Vinatai her freedom only if the latter's son brought 'amrit' (nectar) from Heaven. Soon Garuda was born to Vinatai and he, as bidden by his father, reached 'Tirumeyyam' to offer his prayers to the presiding deity there, Satyamurti. The Lord appeared and Garuda requested him to tell him the ways and means of bringing 'amrit' from Heaven. Vishnu blessed him with the extra strength he needed for achieving his goal, indicating that the nectar was stored at the top of the mountain, Mahameru.

¹ For the above paragraphs on some of Pudukkottai's *sthalapuranas*, the Pudukkottai District Gazetteer is grateful to the Tamil scholar and writer R. (Indira) Parthasarathy.

Folk Arts and Dances.—Pudukkottai district, like the other districts of Tamil Nadu, is the scene of a number of colourful and vigorous folk arts and dances.

The 'Poikkal Kuthirai' or the 'dummy horse' dance makes its appearance during festivals in autumn and at social functions all over the district. This art is so-called because the artiste stands either on his own legs or on stilts through a hole on the back of the 'horse' sufficiently wide enough to let him stand conveniently. The dummy horse is made of bamboo and clay, pasted over with paper, and painted. The themes of the dance are generally drawn from mythology. The artistes dress gaudily to look like kings and queens.

The 'tiger' dance was prevalent as a matter of routine during Mohurram festivals. The body of the dancer would be painted with yellow stripes so as to resemble a tiger. Drums beaten with sticks invariably accompanied a tiger dance, the dancer making fanciful imitations of a tiger's movements. As the tiger dance has, in the past, given rise to communal disturbances, its presentation is not encouraged by district authorities now.

One of the types of dance common to all parts of the district is the stick dance known as 'Kolattam'. A group of girls from a circle or stand in rows, each holding two sticks each about a foot long. They knock rhythmically either their own or their partner's sticks, to the tune of a song.

The 'Karagam' is a frenzied dance performed mostly during the annual festivals of the village deities. The special feature of this dance is that the dancer dances to the music by balancing a small decorated mud or metal pot on his or her head. Sometimes the number of pots is increased to two or three. The pots are not tied to the head or the neck but are made to stand on the head of the dancer by means of a round piece of cloth called 'summadu'. The majority of the Karagam dancers in this district are female. Experts do acrobatics (balancing the pot) such as prostrating, jumping. The skill of the dancer is tested by his ability to keep the pot or pots on his head steady without support.

SOURCE:- Census of India 1961 Volume IX Madras, and State Geologist, Madras.

The 'Kavadi' is similar to 'Karagam', the only difference being that, a 'Kavadi', a wooden arch decorated with peacock feathers and tinsel, is substituted for the small mud pot. The base rod of the 'Kavadi' is balanced on the shoulders and is even made to roll from one shoulder to the other across the back while the dance is performed. Generally, all those who dance the 'Karagam'¹ dance this also.

The 'Oyilattam' is another cultural pastime in which rows of dancers, dressed colourfully and with a handkerchief in their hands, recite in chorus songs with 'puranic' and religious themes, waving simultaneously the handkerchief in tune with the rhythm of movement of their bodies and steps.

In the 'Bommallattam', a variety of the puppet show, toy-like card board figures mounted on wooden sticks are maintained from behind a white cloth screen. The movements of the toys are varied according to the theme of the drama and song. The shadow of the movements of the toys are seen by the spectator from the other side of the screen. The all-night show is witnessed by large village audiences. 'Bommallattam' is also played on festive occasions often connected with the local temple, and is believed by the village-audiences as an auspicious event that will ward off evil spirits, epidemics and drought.

'Silambam' is a martial game played by adolescent youths to show their prowess. This is played during annual festival of Hindus and Muslims. The participants hold in their hands hard bamboo sticks about 5 to 6 feet long, and strike at each other. The offensive and defensive strokes are masterly in execution. It provides many thrills to the spectators and several anxious moments to the participants.

Festivals.—The Pudukkottai-born Tamil writer Akilon describes the festivals celebrated in Pudukkottai villages in the following words: "I spent a few years of my youth in Perangalur village. Perangalur is eleven miles from Pudukkottai on the Pudukkottai-Thanjavur highway. If we talk about the festivals of this village, it would generally be representative of the festivals in the other villages of Pudukkottai State as well.

¹ In a note for the *Pudukkottai District Gazetteer*, translated from the original in Tamil by V. Sundaram, I.A.S.

Most of the villages had a Shiva temple in the centre of the village with temples of village goddesses (deities) on all four sides of the village in the periphery. It is not therefore surprising that all the festivals were often connected with these temples. In view of changed times and all that follows in its train, the village goddesses (deities) which today are called as guardian deities might appear to be not inspiring the same faith or exercising the same influence among the people as in the days of old. However, I am here alluding to the events of 30 to 40 years ago. It was then the general and common belief among the people of the village that these village goddesses (guardian deities) afforded them protection against small-pox, cholera, snake-bites and other poisonous bites as also against the depredations of dacoits, robbers and thieves. Worship of these deities during the annual festivals dedicated to them was accompanied by song, music, dance, folk and country dance and Kummi.

Pidariar Festival —

The Pidari Amman temple on the eastern part of the village, though small and diminutive in size, yet houses a 'powerful' deity. There is a tank on the rear side of the temple. As the tank provides drinking water, it is not contaminated or polluted by anyone. On the right side of the tank below the peepul tree there is a deity. Around this tree one can see hundreds of figures of children made of clayey mud and locally known as 'Madalaikal' (மடலைகள்). This place also abounds in mud figures of serpents and cobra. In order to give protection to the children against serpents and snakes and also to ensure their general well-being in the face of dangers and odds, the help and blessings of the Goddess are invoked by propitiatory measures like the installation of these mud figures.

During the Pidari Amman festival celebrations, women from the village and the neighbourhood come to this spot carrying a new mud pot on their heads. The mud pots will be laden with grains of new paddy. Coconut spathes (பாலை) would adorn the mouths of these mud pots. The scene, with flowers getting scattered all around the mud pots and with women walking gracefully in rows carrying on their heads, is indeed enchanting and wonderful.

The new mud pots which these women carry on their heads are known as 'madhu kudams' or wine jars. Perhaps it seems plausible that these mud pots are called because they are decorated with coconut spathes (country wine is extracted from coconut trees). I have watched with enjoyment the spectacle of women doing the Kummi dance around the mud pots after having assembled them together in one place in the centre. The process of mirth and merriment would be set in motion by one woman beginning with a song who will be followed by other women doing the Kummi dance in chorus.

Many men of those days sported long hair. As a custom, they would 'do up' their plaits with flowers the women used to wear flower garlands. In the open enclosure of the Pidariar Kovil, amidst fun and frolic, there would be an exciting and competitive performance of the Kummi dance by women and Oyilattam by men.

Alongside this fanfare, dramatic troupes from the other villages and towns were also invited to participate in the celebrations. A thatched theatre was put up in front of the Pidariar temple. Flood it by gas lights¹ and torches these performances (Kuthu, Natakam) could begin after 8 in the night going on till early in the morning. Suitable remuneration, either in the shape of paddy or in terms of money collected from the people, was paid to the dramatic troupe.

Fire Walking Festival

Two deities in the south and north of the village were Urumanar and Malaiyamarungar. Women were not allowed to go to the Urumanar temple which was inside a forest. There were statues of heroes on horseback and elephant back around this temple, the sight of which was really awe inspiring. Some of these were stone statues; some of mud or terracotta. The temple priests in both the Urumanar and Malaiyamarungar temples were Harijans. Despite this, people belonging to all the 'higher castes' visited the two temples and offered worship.

1. K. R. Srinivasan remembers :

" Petromax lights were not known to us in Pudukkottai in those days. The gas lights with pressurised tanks below and incandescent on the top of the stand, fed by a long copper tube and closed by plates of glass held by a tin frame work, they were called 'Washington lights' or 'Gas lights'.

The most important event in the Urumanar Temple festival was fire walking. On an appointed day during the festival season, a long square-shaped bonfire would be raised at a spot opposite the Urumanar temple. Fed by firewood and other fuel, the bonfire would be ablaze with flames, emitting an unbearable and unquenchable heat that made it impossible for anyone to go near the fire. With ardent and passionate religious fervour five or six men would walk on the bonfire and offer worship to Urumanar without their feet getting damaged or harmed in any way by the flaming fire. I have often been wonder-struck by this scene and asked myself : "What is the faith that moves them to step so dangerously on the fire unmindful of the dangers ? What is the force that protects and preserves them even as they walk and brave the fire ?".

Apart from fire-walkers there were other ardent devotees who would self-mortify themselves by having their bodies spiked by sharp spears. Some would have their tongues spiked in this manner. With sharp spears sticking out of their bodies and tongues, some of the devotees would take out a ' Pal Kavadi ' (Pal—Milk ; Kavadi—Votive march or procession). Long before the appointed day of self-mortification, they would prepare themselves for the joyous ordeal by observing fasts and other self-restrictions and self-denials sanctified by custom and tradition.

Connected with the Urumanar temple festival was the celebration for the guardian deity on the western side of the village. Behind the Shiva temple, on the bank of the tank, below a tree, goats would be offered to the deity as sacrifice. Even caste Hindus and Brahmins, despite their being vegetarians would not refrain from offering animal sacrifices if in case they had taken a vow to this effect. Such sacrifices would begin early in the morning and go on up to noon, leaving a stench that lingered long after the day of sacrifice.

During the festival season, a large number of small shops would spring up in the village. Shops selling sweets, eatables, dolls, bangles, etc., would come to the village as if from nowhere. Merry-go-rounds would be put up to entertain the children. Needless to add, there would be a huge concourse of people.

Shiva Temple Festival

During the months of May and June, continuously for a period of ten days, a Shiva festival would be celebrated. The deity would be taken out in procession on all the ten days. Connected expenses of organising the procession each day would be met by an affluent and important devotee of the village every day. The vehicle for the Lord would also be changed from day to day, on which he together with his consort would be dressed and mounted on the vehicle and brought to the gateway of the temple. Devotees would then offer their worship. Some would engage themselves in decorating the vehicle and the image. Arrangements would thereafter be made for the procession. The Chief deity of Perungalur is called Kulothunganathar. The temple should have been built during the time of one Kulothunga Chola. The name of the consort is Mangalanayaki. It is considered to be a very 'powerful' deity. Even people who have left Perungalur and gone to Bombay and Delhi in search of livelihood offer worship to Kulothunganathar and Mangalanayaki.

The introduction of legislation for the abolition of the 'devadasi' system in the erstwhile Madras Presidency did not affect Pudukkottai State where this social custom still continued. The dancing girl attached to the Shiva temple in Perungalur would come and participate in the festival. She would join the procession and sing and dance along with the dancing girls from the neighbouring villages who would also be invited for the festival. Natadaswaram performances would also be part of the celebrations.

In order to carry the Lord mounted on the vehicle during the procession, farmers from the neighbouring villages would come in large numbers to Perungalur. Their only recompense for this labour of love would be betal-leaf and nut. They would come to carry the Lord in procession, considering it their bounden duty. On the last day of the celebrations, the image would be taken in a chariot. The entire village would join the effort and pull the chariot with gusto. There would be fire-works and crackers. The whole village would then seethe with a new life and excitement.

As in other parts of Tamil Nadu, in the month of January the 'Otti Pongal' festival and 'Matu Pongal' and 'Manji Virattu' (Bull fighting) were celebrated in the village. On the day of 'Manji Virattu' the youths of the village would compete with one another in getting hold of the specially trained bulls by the horns and trying to subdue them in a brave manner regardless of the dangers involved. In the process, some stood the risk of even losing their lives.

When I recall these festivals, one thought comes to my mind. When it was time for labour, people laboured with enthusiasm. (I would not like to refer to whether they reaped the full benefits of their labour or not). Likewise when it was time for leisure, the people participated in festivals and festivities, fanfare, music and dance with gaiety and gusto. Be it music or dance or games of valour it was marked by a vibrant and voluntary participation of people, inspired by faith and animated with joy".

Akilon speaks of the festivals in the past-tense because his narration is in the form of recollections of his childhood spent in Pudukkottai. The festivals he speaks of are still performed, although with some differences.

Following is a description by K. R. Srinivasan of some of his reminiscences of festivals in the Pudukkottai State:—"But the grandest of the temple festivals were those in the principal temple of the State in Tirugokarnam, the Chittirai and Adi festivals drawing large crowds from far and near. Three of the ten days of each festival were financed by the Raja, the Dewan and the Palace ladies respectively, which added splendour. The goddess, being the tutelary deity, (the Rajas) called themselves Brihadambadasas was afforded all the honours and regalia of State. The procession in the streets when the deity came out every morning and night of these ten days, was led by the State elephant, followed by a cavalry detachment of mounted lancers and an infantry platoon accompanied by the military band-all in full uniform and accoutrement. On the three special days, when the Raja and the Dewan

personally joined the procession walking in front of deity, all the civil officers—the senior ones with special Darbar dress—attended as on duty. The military wore their ceremonial dress in red (other days they wore khaki) as also the police detachment that followed. Then came the Karaga band, the Nadaswaram and Chinamelam groups with the dancers performing in front of the deities and the dignitaries, as the procession moved. On the three special days the Nadaswaram party and the Chinamelam (nautch orchestra) had their special dress, lace-dhoties khurtas and laced puggarees. Behind the row of deities followed the line of Brahmins chanting Vedas and bhajan-parties, and the rear was made up of two more elephants.

The same was the case when the Raja rode out in State coach on Vijayadasami day, the last day of Dasarah—this State procession was in full State regalia and ceremony. The return to palace was a quicker one. The Raja held a Darbar in the palace, which was attended by all officials, when Nazirs were presented. These colourful ceremonies added their own glamour to this small kingdom in those days, which I recall with nostalgic pleasure.

The float festival in the Arimalom temple of Chottinadu part of the State was another attraction. For in those days, when electricity was a wonder the whole edifice of the float with the deity inside it was lit by thousands of multicoloured lights in series. Some of the best Nadaswara vidwans of the South were engaged for this and these two attractions were enough to draw large crowds from far and near.”

Narttamalai is the seat of a particularly important festival at its Mariamman shrine in March-April. A large concourse of pilgrims from all over the district and outside converges at the site. “Wearing of a mouth-lock, piercing of the body with sharp needles, and other modes of self-torture often gruesome, carrying of Kavadis, shaving of the head and offerings of salt, jaggery, cotton-seed, grain, fowls, sheep, goats, etc., are some forms of vows performed here on this occasion.”¹

¹ ▲ Manual of the Pudukkottai State, Volume II 1944

The *Manual of the Pudukkottai State* (1938) says of Mariamman "There are two or three different accounts of Mariamman. According to one she was originally Renuka, the wife of Jamadagni and mother of Parasurama. Her husband, suspected her of having been unchaste in thought. He therefore ordered his son Parasurama to cut off her head. As a reward for his ready obedience he promised Parasurama a boon, and he thereupon asked for his mother to be restored to life. The father directed him to join her trunk and body together and repeat a prayer that he taught him. But Parasurama in his haste, by a very singular blunder, joined the head of his mother to the body of a Paraiya woman, called Matangi, who had been executed for some crime. The result was the goddess Mariamman. The gods gave her the power of curing small pox. Mariamman is extensively worshipped in Southern India. She is held in great veneration and is known as Amma or Tai (Mother) and Periamma (the great Mother) As the goddess of small pox, she is called Marimuttu, Mahamayi, Nallamutu, Muttyalamma and Sitalammal. Near her temple are found the figures of Virabhadra, Matangi, Kattavarayan mentioned above and சுக்கு மாந்தடிக்காரர் (the wielder of the great magic club,) her door-keeper who carry big clubs.

Special seats of her worship in Pudukkottai are seven in number, viz., Narttamalai, Vaittikkoil, Konnaiyur, Tennangudi, Tiruvappur, Kannanur and Uaiyanur to the east of Tirumayam. At the first three of these places, hook-swinging was practised till it was stopped by Sarkar order in 1876. Those who imagined that they had received a great benefit from the goddess or wished to obtain them, made a vow to suspend themselves in the air. A strong post about 10 feet high was fixed perpendicularly on the ground, on the top of which a long pole was fixed in such a manner that it would revolve as on a pivot. One end was weighted and to the other end a kind of chair was attached in which sat the devotee, who was hoisted up and swung by hook fastened in his flesh.

Among the forms of self-torture still practised to 'please' this goddess may be mentioned walking on wooden shoes with spikes sticking out of them; dragging a car four or five feet high by

means of ropes attached to hooks fastened in the flesh measuring the whole distance to a place of pilgrimage with the length of the body by lying down and rising alternately; rolling all the distance to a place of pilgrimage: holding an arm constantly erect until the blood ceases to circulate in it; wearing a 'mouth-lock' which is an instrument usually made of silver and worn with a pin stuck through both the cheeks between the teeth so as to keep the mouth open; and passing a silver spike through the tongue." Another Pudukkottai-Born Tamil writer, Al. Valliappa,¹ has composed a special song on the Mariamman at Rayavaram:

சக்திமிக்க தெய்வம் எங்கள்
முத்துமாரி அம்பிகை
சரணடைந்த பேருக்கெல்லாம்
அருள் சுரக்கும் அம்பிகை
பக்தர்நெஞ்சில் குடியிருக்கும்
முத்துமாரி அம்பிகை
பதம்பணிந்தால் இதம்குளிர்ந்தே
பாதுகாக்கும் அம்பிகை
திமையாவும் சுட்டெரித்துச்
சீர்பெருக்கும் அம்பிகை
செல்வம் கல்வி நீண்டஆயுள்
நல்கும் எங்கள் அம்பிகை
நாமெல்லோரும் சேமமாகப்
பூமிதன்னில் வாழுவே
ராயவரம் மாரியம்மன்
நல்லருளை வேண்டுவோம்.

Sadasiva Brahman and the Dasara.—The author of *A General History of Pudukkottai State* informs us: "About 1738, the Tondaiman obtained a spiritual guru and in accordance with his directions instituted many charities, which have been most reverentially maintained to the present day. The name of the guru is Sadasiva Brahma, and to his blessings is attributed the continued prosperity of the State. Sadasiva Brahman was a very famous sage thoroughly conversant with Hindu philosophy, as also a great spiritual teacher. His likenesses are eagerly sought after by the people of

¹ Al. Valliappa, who has specialised in writing verses for children, is Special Officer for Children's Literature in the Southern Languages Book Trust.

Pudukkottai, and, when secured, placed among the pictures of Gods for worship. He was born more than two hundred years ago at Tiruvasanallur, a village near Kumbakonam, which has long been noted for its learned men. After learning the elements of literature and grammar under (it is said) the famous Ramabhadra Dikshitar, the author of the Sanskrit play Janakiparinaya, he is said to have renounced the world.

In 1738 or just before, Vijaya Raghunatha Raya Tondaiman had the good fortune to receive spiritual instruction from Sadasiva Brahman. It is not definitely known where the meeting took place between the ruler and the Yogi. Some say that the Tondaiman met him in the forests near Sivagnanapuram, a little to the south-east of the Pudukkottai town where the ruler often lived while others assert that the Yogi was at no time within the limits of the Pudukkottai State, and that it was in the bed of the Kaveri, when the Tondaiman was on a visit to Trichinopoly, that the prince saw his future preceptor. The Tondaiman must, immediately on seeing the Yogi, have known him to be a great sage, and made his obeisance to him requesting spiritual instruction. The sage thereupon wrote on the sand by his side the Dakshinamurti Mantram, *i.e.*, the prayer to Siva in his form as the south-faced preceptor of the Rishis, as also a direction that the Tondaiman should have as his spiritual Guru Mahabashyam Gopalakrishna Sastriar a class-mate of the Yogi in his boy-hood¹.

Gopalakrishna Sastriar was sent for, was made the Palace Guru and granted rent-free the two villages of Kanappettai (otherwise called Brahnavidyapuram) and Pinnangudi (Muktambal Samudram). The Guru chose to reside at Namanasamudram, a Brahmin Sarvamanyam Agraharam, six miles to the south of the town. To this village one-third more land was added, and one-fourth of the village was granted as Sarvamanyam to Gopalakrishna Sastriar. The Tondaiman was required by the Guru, for the expiation of his past sins and for the security of the future

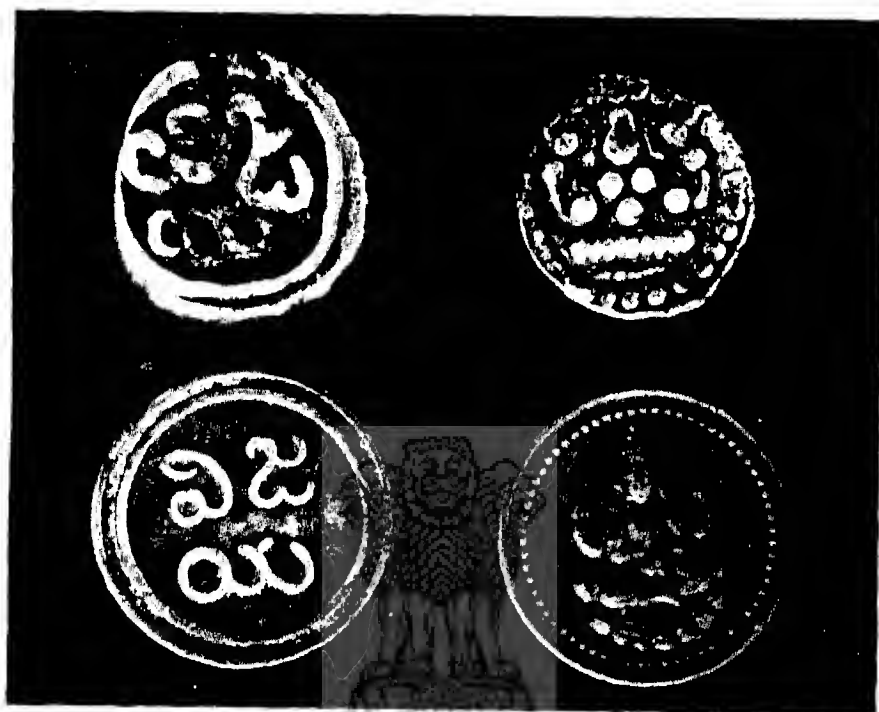
¹ The sand on which the 'mantram' is believed to have been written by the sage is preserved in the precincts of the Dakshinamurti temple within the old palace in Pudukkottai town. A small image of Sadasiva Brahman is to be seen at the Brihadambal temple at Tirugokarham, Pudukkottai.

welfare and prosperity of the State, to institute the worship of Dakshinamurti, in the Palace, and to arrange for the annual conduct of the Navaratri or Dasara festival, when Lakshmi, Durga and Sarasvati were to be worshipped and a large number of Brahmins were to be fed and given doles of rice and money, etc., and for the distribution of Svayampakams (rice and other articles required for Hindu meal) to a number of Brahmins every day and to all girls that might apply therefor on every Friday. It must have been about this time that the Ammankasu, the State coin, of which a large number is distributed during every Dasara, was first struck. The charities that were then instituted have been maintained to this day with great care. The sand on which the Dakshinamurti Mantram and the direction for the appointment of Mahabhashya Gopalakrishna Sastiar as the spiritual Guru of the Tondaiman were written is preserved in the Palace.

Sadasiva Brahma, after the incident referred to above, again wandered where he liked and ultimately sank into eternal repose at Nerur near Karur. A few days before he closed his earthly career, he is said to have specified the date and the hour of his death and asked the inhabitants of Nerur to have a pit ready for his Samahdi, in which was also to be buried a *bana lingam* (a white stone representing the essence of Siva) that would then be brought to the place he said, by a Brahmin from Benares. Every thing occurred just as he had predicted, and, at the closing moment of his life, men specially sent by the Tondaiman, to whom information must have been sent by the Nerur people, are said to have been present. A temple was built by the Tondaiman over his tomb, which was endowed with two villages in the Tirumayam Taluk by the Tondaiman."

The Dasara festival, thus instituted, was celebrated with great eclat in the erstwhile State until the beginning of World War II. Akilon discribes¹ the festivities thus : "As in the other princely Hindu States of India, Dasara was celebrated in Pudukkottai State also. The celebration was confined to Pudukkottai town. The moving spirit behind the festival was the raja himself and his close

¹ In a note for the *Pudukkottai District Gazetteer*, translated from the original in Tamil by V. Sundaram, I.A.S.



नमो भगवते वासुदेवाय



The Amman Kasu

Photo : M. Krishnan

kith and kin. The raja would lead the Dasara procession draped in colourful royal attire bedecked with jewels and all those intimately connected with the royal household joined the colourful procession. The royal elephants and horses led by the soldiers and heroes from the royal army also adorned the procession. On all the ten days of the Dasara festival, there would be a mass feeding of Brahmins. In the royal choultries, there will be continuous and uninterrupted cooking and mass feeding. Pilgrims and travellers from outside towns and villages will congregate in Pudukkottai town during the season. Apart from mass feeding, the Brahmins were also rewarded with brass coins called Amman Kasu specially prepared for the occasion by the Darbar." There was also a Vidvat sadas (congregation of learned men pundits) and symposia were held and the pundits rewarded according to merit, as determined by a body of judges--some of the rewards being annually recurring sums.

The War, however, forced the Darbar to antail expenditure on the festivities¹. This was also the time when the Amman Kasu went out of circulation.

The Amman Kasu.—All the brahmins in its territories assembled at Dasara time in the Town to receive from the State, doles of rice and four pieces of the Amman Kasu. Not all brahmins of course : the high placed among them and their families did not join. But for the bulk of the brahmin population in the State, the Dasara meant ten days of free communal feeding at the State's expense, and the bringing home of these copper coins and a measure of rice.

The State, setting considerable value on this annual function, busied itself in organising it with great ceremony. P.M. Subramanian², who had served as a supervisor in five Dasaras, remembers the scene vividly :

"The feeding of the Brahmins was conducted in 4 places. The Town chatram was the central place for feeding Brahmins of

1. In a note dated 19th July, 1942, to his Assistant Administrator, the then Administrator of Pudukkottai, Sir Alexander Tottonham said "We have got to decide in good time what we are going to do about desara. I will not in war time spend thousands . . ."

2. P. M. Subramanian was born on 1st December 1904, and retired as Head Clerk, Inam Settlement Office, Pudukkottai. The extract is from a Note given by him for the Pudukkottai District Gazetteer.

all sections. The Vaishnavites were fed at the Varadaraja Perumal Koil with Vaishnavite cooks to cater. The Madhwas were fed in Vithoba Koil employing Madhwa cooks. The Pandits and Vidwans numbering about 100 to 150 were fed in the Girl's Branch School. Each of the 4 feeding establishments was under the charge of one officer of the State, such as a Tahsildar, Town Sub-Magistrate, etc., with two clerks to assist them. Before the feeding commenced at 11 a.m. and 8 p.m., meals were sent to the Palace, to the Dewan, the Dewan Peishkar and his P.A. After the noon meals the brahmin population in the State excepting a few high placed officers and their family, used to assemble in the old Palace Square which had four gate ways. The southern entrance was the main entrance and was called Hazara Vasal (ஆசார வாசல்). The west gate opposite to the Post Office was called Anai Vasal (ஆனை வாசல்) as it was near the Elephant stable. The eastern gate was called Pallavan Vasal as it was facing Pallavan Kulam. The north entrance, intended exclusively for ladies, was called Mudukkuvasal, It is near the Ayurvedic Hospital. The four entrances were barricaded with bamboo thatties. At the entrance to the gateways, a small shed was constructed to store the rice bags. Three clerks were employed, one man to watch the measuring of the rice, the other clerks who had the Amman Kasus, to place the kasus in the doles distributed. The distribution would commence at 2.30 or 3.00 p.m. and would be completed before 6 p.m. Brahmin servants employed on duty were paid at the end of the Dasara. On the last day, instead of Amman Kasus, 2 anna silver pieces were to be given. Even children aged a month were given the dole. For the benefit of the public, guns were fired at 12 noon, 1 p.m. and 2.30 or 3.00 p.m. At the stroke of the third gun fire, distribution would commence. Usually, a Sumangali would be given the first dole “.

The feeding of Brahmins at festivals is not a novelty. What makes the Pudukkottai custom at Dasara distinctive is the gift to the Brahmin congregating of the four pieces of Amman Kasu, the only coin minted for the State. Meaning, literally, the coin of the

Goddess, it is believed¹ to have first been struck in 1738. Its last mintage was in 1934. Its name is derived from the embossing on its obverse of the seated figure of Brihadambal, the tutelary deity of the Tondaimans and on its reverse the word "Vijaya" in Telugu characters. The word is associated² with the name of Raja Vijaya Raghunatha Todaiman (1730-1767), in whose reign it was that the coin was first struck and issued.

The earliest official reference to the Amman Kasu found among the Darbar Records in Pudukkottai is in an order of 1869. It contains the following information in a letter from the Sirkele to the Government of Madras :

"A peculiar coin named Amman Kasu, which is three-fourth of the size of a two anna piece and 5 of which is in value equal to 3 pice is occasionally struck here. It is prepared by workmen at this place on payment of wages. These coins are never manufactured either annually or at stated periods but on occasion when there is demand for it. Its use is confined to the limits of this territory. The practice of striking this coin appears to exist in this State for a long time past and there is no record to trace its origin".

After their largely ritualistic *entree* the coins found their way into the hands of the general public where they acquired tender.

Sashiah Sastri³ true to his zeal for improving every conceivable aspect of Pudukkottai's life, turned his attention to the Amman Kasu also. They had been hand-cut thus far, country dies being the instrument employed. He thought them "very clumsy and unequal in weight⁴". He believed that the copper coin was of great utility to the poor man of Pudukkottai "in the purchase of food articles", larger denominations of currency being outside his easy reach. He wanted, therefore, to put the Amman Kasu "into extensive circulation", and wrote to P. Orr and Sons⁵, Madras, asking whether they could undertake to manufacture the Kasu for the Pudukkottai Darbar. The Company regretted

1 Darbar Records, Pudukkottai

2 Ibid.

3 Darbar Records, Pudukkottai.

4 Ibid.

5 Established 1875.

its inability to do so, offering at the same time "to obtain an estimate for the work from England". The Diwan-Regent, thereupon, addressed the Master of the Mint, Calcutta. He wrote: "Our present cost is Rs. 256'6 $\frac{3}{4}$ per 100,000 pieces manufactured with the hand. The rate at which we issue them leaves us a mintage profit of Rs. 56'25 $\frac{1}{4}$ per lac". He was not interested, he added, in the profit and would not, in fact, mind "even a small loss" in the minting of the Kasu because of its utility to "the poorest classes"¹. The Mint Master reported that he could mint 20 lakhs of the Amman Kasu for Rs. 4,820. But the then Political Agent, W. A. Willock, to whom the Diwan-Regent had written for permission to mint at Calcutta, wrote back inviting attention to Section 8 of the Indian Coinage Act 23 of 1870, according to which only fractions of the anna, such as the Double Pice, Pice, Half Pice and Pie could be coined there. He added, moreover, that the coins minted at Calcutta "should bear on the obverse the likeness of Her Majesty Queen Victoria and the inscription 'Victoria Queen'". Sashiah Sastri, despite his long association with the British, was a dedicated Hindu. The irony and the impossibility of the Political Agent's suggestion that the Goddess be replaced on the coin by the Empress, could not have been lost on him. The Diwan-Regent reiterated his request, explaining that the Amman Kasu was to be outside the provisions of both the Acts XXIII of 1870 and IX of 1876, and that it had a limited circulation entirely within the State. The matter went up to the Governor-General in Council, whose orders were communicated in Government of India's No. 1666, dated 28th March 1888 (Department of Finance and Commerce). "Under the Law", the order said, "no coins may be struck in the mint but those which are specified in Act XXIII of 1870 and the Native Coinage Act". The order added, rather intriguingly, "if the coinage were permissible under the law, the transaction would be contrary to the policy which has always been held in view and

¹ At the rate of Rs. 100 Per Lakhs plus charges on

(1) Copper (3 $\frac{1}{2}$ maunds)	..Rs. 133
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(2) Packing 5
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(3) Shippings 3
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Rs. 141 (Total Rs. 241 per lakh coins)

acted upon by the Government of India". On receipt of this rejection, Sashiah Sastri picked up the thread left with P. Orr and Sons, "accepting their offer to write home for an estimate".

His efforts appear to have borne fruit, for we find¹ that by 1906, minting in England had commenced.² Four dies were made in England and the coins struck, the last consignment reaching Pudukkottai in May 1906. The dies were brought down finally to see if the minting could be done in the State thereafter. The minting of coins for 'Native' States had by now become permissible³ under Section 23 of the Indian Coinage Act, 1906. The British Government, therefore, while not permitting the coinage in Pudukkottai, offered to do it at one of the Government Mints. The offer was accepted by the Darbar which informed the Government that about 2,07,800 Kasus were being issued annually. The value of the Kasu was reckoned to be 1/16 of an anna since May 1906 (before which it was 1/20th of anna), on account of the rise in the value of copper, the cost of minting 2,07,800 pieces at 19.6 grains per piece, was reported by Government to be the approximately Rs. 645 inclusive of minting and transporting charges. Eight lakh pieces were minted at Calcutta in 1919 next, at a cost of Rs. 3,569.00 and in 1925 at Rs. 3,241.30.

Eight lakh Kasus were minted again in 1934⁴ at a cost of Rs. 3,590. In 1942 the Calcutta Mint reported it would charge Rs. 4,965 for eight lakh pieces. The face value of eight lakh Kasus, it was worked out was less than the actual value by about Rs. 850. Loftus Tottenham, who was Administrator of Pudukkottai at the time ordered that the proposed minting be cancelled on account of the high cost. The coin was, therefore, last minted in 1934.

As interesting as Sashiah Sastri's attempts to increase the coin's tender by raising its circulation, are Tottenham efforts⁵ to get it accepted by British India as currency for postal purposes. After a certain amount of 'pushing', the Administrator got the Post-master-General to agree to receive the Kasu for payments in Post

1. Darbar Records, Pudukkottai.

2. In 1900, the Kasu had been officially declared legal tender (Darbar Record Pudukkottai).

3. Darbar Records, Pudukkottai.

4. Darbar Records, Pudukkottai.

5. Ibid.

Offices within the State. The Postal Department was permitted to convert the Kasus into currency at the Pudukkottai State Treasury. This was probably the one and only instance of the coin being weighed in a scale against British currency. Sashiah Sastri would have rejoined at Tottenham's achievement as an official recognition of the Kasu as a unit of money.

There was a proposal¹ at this time to switch over from copper to bronze in the minting of the Kasu. The Master of the Mint at Calcutta reported to Tottenham that the Amman Kasu was, at the time, the only copper coin being minted by him, all others having changed over to bronze which was a longer-lasting though somewhat costlier² metal. Adherence to copper would have meant maintaining special machinery. Tottenham considered the proposal in the light of tradition. The State's Agama Sastri, who was consulted, declared that copper was considered for all religious purposes, the most superior metal after gold and silver, and ought not be substituted for any other in the coin. The Administrator agreed to stick to copper and noted : " . . . we serve both God and mammon by doing so ".

Smelted in religion, the Amman Kasu surfaced on to the world of Pudukkottai's commerce. And there it served in a definite, if modest, capacity for over three centuries.

Amman Kasu valuations As observed At Six Mintings.

Year.	Face value of one lakh pieces.		Cost of minting one lakh pieces.
(1)	(2)		(3)
1888	312- 8-0		* 256- 5-6½
1915	390-10-0		323- 8-0
1918	390-10-0		446- 2-0
1925	390-10-0		405- 2-4½
1934	390-10-0		448-12-0
1942*	520-13-0		620-10-0

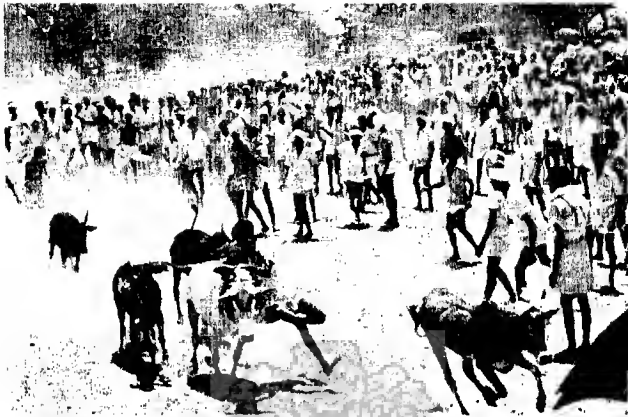
(* Cost as assessed, not actually incurred.)

1. Durbar Records, Pudukkottai.

2. The Mint Master suggested that to neutralize the high price of the new metal, coins weight could be decreased from 18 grains to 16 grains.

The Jallikkattu.—*Manjivirattu* otherwise known as Jallikattu in some parts of Tamil Nadu was a sport long prevalent in the Pudukkottai State. It is stated that there are references to this pastime in the old Sangam classics. In the Pudukkottai State, the Jallikattu was considered as a quasi-religious function to be conducted to propitiate the village deities, and was usually held on any day after the *Thai Pongal* (தைபொங்கல்) when harvesting was over and before the commencement of the Tamil New Year. Even now the date for celebration of Manjivirattu in a village is so fixed that it does not clash with a similar sport held in some other neighbouring villages. This arrangement is to attract a great crowd and to secure the presence of a greater number of bulls for the show in this village. Usually the residents of the village where the sport is held raise subscriptions from the residents and absentee land holders of the village and extend invitations to the owners of bulls to send their animals for the sport. The owners of the bulls and their attendants are sumptuously fed by the villagers. Every one of the bulls irrespective of their reputation, whether tame or ferocious, is given a cloth usually a yard long for being tied round its horns. By noon the bulls are taken to the village common called pottal (பொட்டல்) and are there in batches in enclosures called Tolu (தொழு). The first enclosure belongs to the local deity. The onlookers and spectators stand on the open carts or pandals erected on both sides of the track along which the bulls will race when they are released. Such of those who cannot secure seats in the carts or pandals stand on both sides of the track or climb on the trees nearby. The sport commences at about 12 noon after offering prayers in the temples of the local deities. The enclosure is opened with a beat of drums, blowing of trumpets and the firing of crackers. This enclosure usually contains mainly stand bulls dedicated to the deities in the village or stud bulls owned by the institutions in the adjoining villages. Youngmen intent upon catching the bulls usually stand outside the enclosure a few yards away allowing space for the bulls to come out into the open.

M. Krishnan, the naturalist and photographer witnessed in the spring of 1975, the famous South Indian bull-sport—Jallikattu—at Narttamalai. He describes the sport and spectacle as



Triumph at a Jallikat in Narttamalai.

Photo : M. Krishnan



Disaster at the Jallikat at Narttamalai

Photo : M. Krishnan

the following words : "This old, traditional countryside sport is by no means peculiar to Pudukkottai—perhaps it is best developed in the rural areas of the Madurai and Ramanathapuram districts—but it is also cherished in Pudukkottai and still very popular. Two things about the jallikkattu; both truly remarkable, are surprisingly little known outside Tamil Nadu and even within it. First, it seems to be the only indigenous sport (or at least one of the very few) that has remained in vogue unchanged for close on two thousand years—it is mentioned in the earliest surviving Tamil poetry. Second, it is exclusive to the Tamil country, and though it is more dangerous to the human participants than the Spanish bullfight, and calls for more physical effort, and courage, and swifter responses, it has remained largely unknown in other regions in the country, and is not celebrated even in the urban areas of Tamil Nadu. Being a rustic sport which is purely natural where there is a pitting of human daring and unarmed physical prowess against the quick-muscled impetuosity, the goring horns and the fierce spirit of bulls specially bred for the southern bull-ring, a sport where split-second timing, perfect co-ordination and an abiding hold determines everything for the men taking part in it, there has been little advertisement for it outside its rustic arena. The fanfare and pomp and colourful pageantry that have made the comparatively less risky Spanish bullfight world-famous are so alien to this sport that the jallikkattu is quite unknown outside India, and hardly known outside Tamil Nadu.

Unquestionably it is a manly sport, if by that we designate any sport where the life of the contestants cannot be insured. True that in a jallikkattu the man is not expected to slay the bull as in a Spanish bullfight, but only to hold and subdue it, but then he is wholly unarmed (unlike the matador) and it is usual for a few men to be severely gored, or disembowelled, in the course of a jallikkattu - sometimes, men are even killed outright. I have seen a man killed in a flash, with a quick reverse-flick of the horns by a notorious bull in the Madurai countryside, and this is by no means a rare happening in this sport.

But if the sport has failed, strangely, to win renown for itself wide and far, it has the most romantic local history imaginable. It is said that in the good old days a man who distinguished himself

by subduing a bull that no one had held in years at once became the local hero, and that there were few things he could ask for which were likely to be denied him : it is said that he could ask for the hand of the comeliest young unmarried girl in the village, and that purses laden with gold coins were freely bestowed on such heroes : it is said, with much truth, that those grievously wounded at a jallikkattu disdained the aid of hospitals and skilled surgeons, and were content to let traditional therapy (such as the application of a poultice of turmeric and the binding of the wounds with banana leaves) decide life and death. I do not mention these things cynically, to say that great deeds are done always in the past, though for 50 years now, I have heard some ardent aficionado or other tell me, that the jallikkattu is no longer what it was only ten years previously when there were still men willing to chance the power and swiftness of their hold however formidable the reputation of some noted bull, and patrons willing to reward daring and skill with no reservations. It could be that the reward of success these days is much less than what it was, but there are still bulls with evil reputations, unconquered for years, that the prudent would give a wide berth to, and still men sufficiently imprudent and impulsive to accept a fearsome challenge—and may be succeed in the attempt.

It is not clear how the term “jallikkattu” came to be applied to the sport—there are theories, as usual. The other names by which it is known are understandable. In classical Tamil it was termed “eru-thazhuval” (ஏறு தழுவல்), literally meaning “grappling with the bull” or “hugging the bull”—it is strange but true that during the British days, Englishmen unfamiliar with classical Tamil have called the sport “grappling with bulls”. A name by which it is also known in the countryside is “manjuvirattu” (மஞ்சு விரட்டு), which explains itself, referring as it does to the driving of gaily decorated bulls down the lane (where the grapplers are lying in wait) from the stockade. In Pudukkottai they also call it “maadu-vilayattu” (மாடு விளையாட்டு) which is also self-explanatory.

The bulls, as said, belong to a well-established breed, compact, powerfully muscled but not too heavy in the barrel, and of many colours called kari (காரி), mayilai (மயிலை) sevalai

(செவலை) etc., locally. Mettlesome spirit and the ability to turn and move at high speed, are important in this sport, and heavy big bull of the Kangeyam or Nellore type would be unsuitable as a water buffalo. The limitation of size is also necessary to give the grapplers a sporting chance—the man that can hug the hump of an Amrit Mahal bull and stop it has yet to be born—the tiger hesitates to tackle a bull of that breed in its prime.

Briefly, the sport consists of the man hugging the hump of the bull as it runs fast, throwing himself on a flank and flinging his arms around the hump in a tight lock having secured his hold, he lifts his feet off the ground if the bull has enough velocity to run on, literally carrying the man on a flank, or can buck and try to throw him. The victory is the man's if he can reach down from his hold and unwind the length of brightly coloured cloth tied around the base of the bull's horns.

The jallikkattu properly organised consists of a stockade with an exit gate into which the bulls are led by their handlers. They are driven out of the gate, the grown bulls singly, the younger and smaller animals usually in twos and threes, and down a lane which is usually fenced with open work palings (through which the grapplers can enter or retreat), but sometimes the lane is not fenced but flanked only by the crowd watching the sport—the sport attracts thousands, and often goes on all day, and bulls are brought to it from miles around, some quite notorious bulls unconquered for many years with, perhaps, a few man-kills behind them. The younger bulls, excited by the shouting and the drums, rush down the lane at a furious gallop—these can be stopped easily by an experienced grappler. The old experienced bulls move down the lane at a more leisurely pace, sometimes just sauntering down it, and these are really dangerous, for they are very fast in attack and can gore or toss a man in a flash, spinning round on their feet any way they like.

A rather lamentable feature of the jallikkattu at Pudukkottai that I noticed, and which people tell me is common, is that when a grappler is successful and subdues his bull, the owners of the bull

and their friends set upon him and beat him up for having done so-- a most unsporting thing to do, and wholly inexcusable in this sport, for the grapplers never do any harm to the bulls beyond holding and stopping them, and they do run a real risk.

The Pudukkottai Darbar tried to ban the sport, but in vain. A system of prior notice and permission from the Chief Magistrate was evolved. But this was generally disregarded. The jallikkattu continues to be as popular as it ever was.

The Musical Traditions of Pudukkottai. -- Pudukkottai, has for several centuries been a seat of music and dance. A number of rulers of the Tondaiman dynasty were connoisseurs of the fine arts. One of them, Vijaya Raghunatha Rāya Tondaiman, was himself an accomplished musician and composer. It is therefore no wonder that musicians vied with one another to receive recognition at the Pudukkottai Court, which was always adorned by a galaxy of musicians. Within living memory there flourished in Pudukkottai such musical giants as Mamundia Pillai, the Karaikudi 'Vine Brothers', Gatam Sundaram Ayyar and Dakshinamurti Pillai of immortal fame.

Pudukkottai had the unique privilege of being blessed by the benign presence of Sadasiva Brahma,¹ the renowned saint composer of South India. According to the Pudukkottai *Manual*, even Tyagaraja is believed to have come to the Court during his boyhood with his guru, Sonti Venkataramanayya, and to have sung there. Nallan Chakravarti K.S. Rangachari has written² that Shyama Sastri visited Pudukkottai and sang before the Brahadambal deity at Tirugokarnam. In the biographical sketches given by Dikshitar in his monumental work, *Sangita Sampradaya Pradarsini* (1904), we find the names of a number of musicians who were honoured at the Pudukkottai Court.

Krishniah, son of Adippiah of *viriboni varnam*³ fame, was a *vina* player honoured there. "Vina" Perumalayya is said to have sung in Pudukkottai a particular raga for twenty days and to have received

1. See under 'Dasara and the Amman Kasu' in this Chapter.

2. Dinamani Sudar (Supplement to the Tamil daily, 'Dinamani') dated 28th December, 1975.

3. *Varnams* are classical song forms, of which the *viriboni* is one.

a reward of Rs. 10,000—a veritable fortune in those days. Seshachala Bhagavathar, a court musician, was a direct disciple of the great composer Syama Sastri. His son Matrubhutayya and grandson Gopalaswami Aiya also adorned the Court. Subbarama Dikshitar states that the latter, a contemporary of his, was peerless not only in his repertoire of traditional songs but also in *raga* elaboration and *pallavi* singing in the field of improvisation. There were also occasions when musicians of extraordinary merit were literally showered with gold coins as a mark of appreciation. Vina Subbukutti Aiya was one to be honoured thus.

The musical traditions of Pudukkottai can be traced to as far back as the seventh century A.D., when the famous musical inscriptions on a rock at the Kudumiyamalai temple¹ are said to have been incised. The body of this epigraph is divided into seven sections corresponding to seven classical raga, the Madhyama grama, Shajugrama, Shadava, Sadharita, Pancama, Kaisikamadhyama and Kaisika. These inscriptions (ascribed by most scholars to the Pallava king Mahendravarman) represent the earliest notated music in India and could well be the first specimen of notation in South India making use of the solfa letters.

sa ri ga ma pa dha ni

On the ceiling of the mandapa in front of the sanctum sanctorum of the deity Akhilandesvari in the Kudumiyamalai temple, a zodiac is drawn. Considering the fact that in ancient Tamil music, musical notes were represented in the zodiac and in view of the musical inscriptions being incised in close proximity, it seems that this sign might also have musical significance.

Between the seventh century and the end of the seventeenth century, the areas' traditions in music and dance are blurred by obscurity. But after Sadasiva Brahman's visit (circa 1738), the picture is brightened by numerous luminaries, both musicians and composers.

1. See under 'Kudumiyamalai' in Chapter XIX.

As was the wont everywhere in those days, it was the temple that nurtured the fine arts and the Brihadamba temple at Tirugokarnam was no exception. A number of musicians and danseuses were in the employ of the State and attached of the temple. During the daily evening service, there used to be a music concert followed by a variety of dances like kummi, kolattam, ammanal and Bharata Natyam. The dance traditions stopped a few decades ago but the musical tradition continues to this day, lingering as a remnant of the glorious past. Time was when eminent musicians like the late Karaikudi 'Vina Brothers', Subbarama Aiyar and Sambasiva Aiyar, participated in the concerts given during the temple service and Nattuvanar Sivarama was performing the natuvangam for danseuses who numbered as many as sixteen. During the annual festival, no less than eighteen instruments used to be played at the time of the procession. Vina, sarandha and later violin, mridangam and dholak were concert instruments and nagasvaram, ottu, talam, tavil, vanga, tiruccinnam, davandai, conch and cekanti were played during the evening service at the temple.

What was known as 'Pari' (musical night watch) was another unique feature in the city, a band of musicians went round the four main streets with music. There were, daily, four such rounds at fixed hours of the night.

1. Melappari with nagasvaram, ottu, talam and tavil.
2. Caripparai—with vocal, music, mridangam, talam, and dance.
3. Manippari—with an instrument resembling the triangle and
4. Tappuppari—with tambourine-like percussion instruments. These also served as time signals.

A 'Pudukkottai Sangita Sabha' which drew members from Tirumayam, Devakottai and Karaikudi was active till the end of the 'forties' playing a prominent part in the cultural life of the people.

In the Trichinopoly Gazetteer, 1907, F.R. Hemingway Writes : "Vinas and tamburas were made in Tanjore and Pudukkottai". Today there are no artisan families in Pudukkottai engaged in making these instruments. They have probably migrated to Thanjavur where there was a greater demand for them.

In the *General History of Pudukkottai State*, (1916) S. Radhakrishna Aiyar mentions Krishniah, his son 'vina' Subbukutti Aiyar; Seshachala Aiyar; his young brother, Ramdas; Ramdas' son Ramu Sastri of Sandaippettai; Matrubbutayya; Vina Subbarama Aiyar of Pudukkottai and Vaidyakavisvarar, a composer as having adorned the Court of Raja Ragunatha Tondaiman and his successor, Raja Ramachandra Tondaiman-Girisa Aiyar was a good vocalist and composer attached to the palace, at the time of its writing (1916). 'Fiddle' Krishnan was a good singer and violonist of those times. The late nineteenth and early twentieth centuries saw in Pudukkottai some notable figures. 'Sarandha' Virasami Nayak was an adept in the north Indian bowed instrument, Sarandha. Nannu Meah and Chhotu, Meah played the north Indian percussion instrument, dholak. Krishna Aiyar was a master of the svarbath, a small instrument with a bucket shaped resonator.

A noted violinist was Pudukkottai Narayanaswami Aiyar. His music is recorded on gramophone discs. His brother, Ganapathi Aiyar, was a vocalist of repute. The brothers were honoured at the Mysore Court. Mamundia (also spelt Manpundia) Pillai was the first to introduce to south Indian music the *kanjerra*, a small tambourine-like hand drum. This has since become a recognised concert instrument to be played along with the *mridan-gam*.

1. S. Radhakrishna Aiyar, Principal, H. H. the Raja's College, Pudukkottai was an eminent mathematician. His association with music has been described by K. Nagarajan in his unpublished memoirs thus. "There was no gainsaying the fact that all-roundness was Radhakrishna Aiyar's most striking characteristic. Late in life he started to learn music and very soon he mastered the theory of Carnatic Music. Music was the last thing of which one would have suspected him but he must have had it in him for it came out when he was in the middle forties. At some get-together someone incautiously observed that for all his cleverness Radhakrishna Aiyar could never be brought to appreciate music. "You think so" replied Radhakrishna Aiyar, went home, collected all the treatises on music he could lay hands on, engaged a teacher, and in less than a year obtained a mastery of musical theory. It set us all wondering. But he did not stop with that. He learned to practice on the harmonium, more exacting instruments being ruled out, and if ever one wished to divert himself at Radhakrishna Aiyar's expense, one had only to ask him for some light on a particular tune or a complicated piece of timing and he was sure to involve himself in an elaborate disquisition accompanied by demonstration more diverting than illuminating, for the twists and contortions which his face underwent and the cacophony of sound which he emitted to illustrate his thesis, were as good as a film-show."

Dakshinamurthi Pillai (1876-1936), **Palani Muthiah Pillai** and **Settur Zamindar** were among his foremost disciples. **Sankaradas Swamigal**, a doyan of Tamil drama, was his adopted son. **Mamundia Pillai's** distinguished disciple was **Dakshinamurthi Pillai**, who played both the mridangam and kanjeera. His performances are recorded on gramophone discs.

Subbarama Aiyar and **Sambasiva Aiyar**, the **Karaikudi vina** brothers' used often to be accompanied by **Dakshinamurthi Pillai** on the *mridangam*. **Sambasiva Aiyar** later was Principal of 'Kalakshetra', Madras, and was one of the first batch of eminent musicians to be honoured by the Government of India after Independence.

Iluppur Ponnuswami Pillai, a violinist and palace vidwan has some tillanas to his credit. His son **Ramachandra Pillai** was also a violinist. He had a famous nephew in the great **Malaikottai Panchabakesa Pillai** of *tavil* fame¹.

Gopalakrishna Bhagavathar, a Telugu brahmin hailing from Melattur in Thanjavur district, migrated to Pudukkottai in his youth and built up a very strong tradition of bhajan singing : **Malayappa Aiyar** was a famous vocalist, **Ariakkudi Ramanuja Aiyangar** and **Musiri Subramanya Aiyar** learnt under him in their boyhood. **Hari Aiyar**, a palace musician until the end of the 1930s was master of several instruments such as the violin, *vina*, *sarandha*, *gettu* and *svarabath*.

Mallari Rao, a *svarabath* player died in the 1940s. **Swaminatha Pillai**, a son of **Dakshinamurthi Pillai**, and a mridangam and kanjeera player ran a Sabha on his own. **Tirugokarnam Kanakambujam**, a harikatha performer of repute, died a few years ago. **Tirugokarnam Subbiah Bhagavatar** and **Vaidyanatha Bhagavathar** were musicians also attached to the Brihadamba temple. They composed a number of tillanas, some of which have gained currency. **Ratnam Aiyar**, son of the former and **Ramabhadran**, son of the latter both violinists, now live in Tirugokarnam.

1. The Curator Government Museum, Pudukkottai states in a note that **K. Chellaiah** a *tavil* artist and disciple of **M. Chinna Muthiah Pillai**, now resides at Tirugokarnam.

T. N. Manickam, a gifted vocalist and disciple of Subbaih Bhagavathar, has recorded on gramophone discs. **Thirugokarnam Ramachandra Aiyar**, a vina player, nephew of Sambasiva Aiyar was sometime lecturer in the Central College of Music, Madras. He has since retired. His brother **Subba Rama Aiyar** is presently serving in the Brihadamba temple.

T. S. Ulaganatha Pillai, a violonist son of **Sivarama Nattuvanar** and disciple of **Marungapuri Gopalkrishna Aiyar** is presently, staff artist, All India Radio, Tiruchirappalli. **T. S. Ranganayaki**, sister of **T. S. Ulaganatha Pillai** is a mridangam player of long standing. A disciple of **Dakshinamurthi Pillai**, she teaches the mridangam and Bharatanatyam at the **Sri Satguru Sangeetha Vidyalaya**, Madurai. **Tirugokarnam Rajagopala Pillai**, is yet another mridangam and kanjeera player. Attached to 'Darpan', Ahmedabad, for some time he is now residing at **Thirugokarnam**.

S. Ramanathan, a vocalist and vina player, after graduating from the Annamalai University, started his career as a teacher in a music school at Pudukkottai in 1938. He was awarded a doctorate in Ethne-Musicology by the Wesleyan University, U. S. A. He is at present principal, **Sri Satguru Sangeetha Vidyalaya Music College**, Madurai.

Dance Masters.—**Sabhapathi Nattuvanar** and **Mahadeva Nattuvanar**, son of **Sivanandam** of the Tanjore Quartette, and **Vadivelu**, son of the former, were all honoured at the Pudukkottai Court as exponent and teachers of dance. **Ramaswami Nattuvanar**, **Muthukaruppa Nattuvanar**, **Vadivelu Nattuvanar** and **Sivarama Nattuvanar** were some of the other dance masters attached to the **Tirugokarnam temple** in the first half of this century.

Composers.—**Vijayaraghunatha Raya Tondaiman (1730-1769)** was himself a composer. The following pieces, known as the 'five gems' are ascribed to this ruler :—

1. **Ezhai pangali** (ஏழை பங்காளி.)
2. **Karunaikkadaikan** (கருணைக் கடைக்கண்.)
3. **Piravi illatharul** (பிறவி இல்லாதருள்).
4. **Manattuyar tirtarul** (மனத்துயர் தீர்த்தரு).
5. **Taruna midamma** (தருணமிதம்மா).

These were ordained to be sung in the temple regularly.

Kesava Bharati, author of the *Kapilai Natakam*.

Mehadevaswami, composer of the popular song *Sri Jagadamba*.

Vaidyakavisvarar, composer of the well-known song *Kurumayi karunam*.

Venkanna, author of the *Tondaiman Vamsavali* and *Parvati Kalyanam*, a musical play and Chidambara Bharati of Mazhavarayanandal, who composed the *Brihadambalkummi* a folk melody, were some of the other composers. K.S. Ramaswami alias Guhan (1915-1973) composed a number of Tamil compositions. *Kandan Karunai*, popularised by the late Madurai Mani Iyer, was his creation. He was one of the staff at the A.I.R., Tiruchirapalli and later at Madras.

It would be appropriate to conclude this description of Pudukkottai musical traditions with a reference to the famous song *Pahiman Brihannayike*, which used to be sung at the Brihadambal temple every Friday. The Sanskrit text of the song was composed after the famous Huseni svarajati of Adippiah, *Emandayanara*. The musician-families in Pudukkottai aver that the text of this song was composed by Svati Tirunal (1813-1846), the Kerala ruler. In the *Souvenir* issued at the time of Svati Tirunal's 150th birth anniversary celebrations at Trivandrum in 1963, the 'Elaya' Raja of Travancore, wrote: "Svati Tirunal had close contact with the Courts of Tanjore and Pudukkottai. There are evidences of the Maharaja dedicating songs to the Goddess of Pudukkottai Brihadambal. The scholarly rulers of Pudukkottai have reciprocated this with songs dedicated to Padmanabha".

The text contains the 'signature' of Svati Tirunal, as well as the name of Vijaya Ragunatha as a devotee of the deity.¹

The Sanskrit scholar, Dr. V. Raghavan has rendered the song into English thus:

Pallavi.

Protect me, Goddess Brahannayike. Mistress of the World, sanctifying Goddess, bestower of boons, O Mother, protect me.

¹ For the above paragraphs on the Musical traditions, musicians, musicalologists, dance-masters and composers of Pudukkottai, the *Pudukkottai District Gazetteer* is indebted to Dr. S. Ramanathan, Principal of the Sri Satguru Sangeetha Vidyalaya College of Music, Madurai.

Anupallavi.

Mother of Subramanya, supreme Goddess, Parvathi, Consort of Siva Gokarnesvara; Flanked by Lakshmi and Sarasvati who adore Her deeds; Worshipped by (King) Vijaya Ragunatha of the family of Vasava.

Svara-Sahitya.

Adorned with snakes: Spouse of Siva the friend of Kubera ; Caretaker of the Gods ; Victorious One ; Mistress of the Universe, Gouri, Uma, Kaumari, Bhairavi, Parasakthi (the Supreme Power) ; Goddess of the lotus eyes, whose feet are praised by the sages Narada, Tumbura, Suka ; Giver of auspicious fruit, Essence of the Upanishads ; Destroyer of sins ; Protect me.

Charanam.

Goddess Bala ; Spouse of Siva ; Mother of the World ; Surrounded by devotees ; Compassionate One ; O Thou who, abiding in Vakula Vana (Garden of Bakula trees) has her home in the Meru Mountain; Katyayani ; O beautiful One ; Praised by Brahma and Vishnu. Thou with a face excelling the Moon and feet excelling the lotus in beauty ; Whose nails lusture excels the glory of the Moon; Whose gait excels that of an elephant ; O, Raja Rajeswari, Narayani, sister of Rama (Vishnu) ; Auspicious Goddess, who gives all the desired needs ; Daughter of the King of Mountains, the bearer of the trident; O Thou of the serpent like tresses, Goddess of Wealth, Goddess of Learning ; Thou of the nectar-like speech...''

Dr. Raghavan observes on the subject of its authorship :

“ Although this svara-jati on the Goddess in the temple at the outskirts of the city has been current in Pudukkottai, as a composition of Maharaja Svati Tirunal, there are reasons to doubt the authenticity of the authorship. Firstly, the deity is referred to as worshipped by Vijaya Regunatha. If this was the ruler of Pudukkottai, his date 1730—1769 would be too early for this composition which is an imitation, being Sanskrit words supplied to the tune and setting of the wellknown Huseni Svarajati, which

became very popular later and led to many imitations. There were of course some relations and transactions between Travancore and Pudukkottai during the time of Svati Tirunal but there is no reason to suppose that the Maharaja of Travancore composed this palpable imitation for the sake of his contemporary ruler in Pudukkottai on his local deity¹.

Whatever be its authorship, the song continues to be sung in Pudukkottai with devotion.

The Viralimalai Kuravanji.—Shyamala Balakrishnan of 'Nrithyodaya, Madras, who collected, in 1957, a sixty-year old manuscript containing the text of the major portion of one of the famous Kuravanjis² of Pudukkottai, writes³ :

"The temples of Tamil Nadu have helped to preserve music, dance and drama. These arts were incorporated in the rituals, ceremonies and festivals of the temple. Concerts of music, dance and drama were arranged during festivals, and these provided education through cultural entertainment to the masses, who were admitted free to these entertainments. To maintain continuity of tradition, families were given 'Manyam' (hereditary endowments) in return for their services to the particular art which they were expected to preserve. Kuravanji was one such art which, as already pointed out, is a combination of the Kuram and Kuluva Natakam. Whereas the latter two exist only in texts, some of the Kuravanjis existed as a practical art till very recently. It is a great pity that they have practically gone out of vogue, owing to a sociological changes brought about in the first half of this century.

¹ See on this controversy : *Journal of the Music Academy*, Madras Article by Dr. V. Raghavan 'Huseni Svara-jati', in Vol. 37, 1966. S. Ramanathan (same *Journal*) pages 177-183, Sanskrit text with Tamil text and notation of this Svara-jatis Dr. S. Venkitasubramoni Iyer: *Journal*, Vol. 43, 1972, pages 192-94.

² 'Kuravanji' (*Kuram*, meaning fortune-telling or the Kurava tribe of the hill and *Vanji*, meaning woman) denotes a woman of the hilly tracts who practices the art of fortune-telling. There is also another interpretation of *Kuram* plus *Anji*. The latter word means, in Telugu, 'Step' Kuravanji can, therefore, denote a step practiced by the Kurava tribe.

³ Unpublished dissertation, 1961.

The Kuravanji is listed among the 96 prabandhas of Tamil literature. It appears to have had its heyday in the 18th century following the fame of *Kuttrala Kuravanji* composed by Thirukoodarajappa Kavirayar.

The origin of this popular form of dance-drama, however, can be placed at least a century earlier, if we are to allow for the time required for a natural growth of the art. In its present evolved stage the Kuravanji is a happy combination of folk and classical traditions in music, dance and drama. Hence its great charm and popularity.

The story of Kuravanjis is a familiar one ; the love of the heroine for a god or prince, the Kurathi's fortune-telling, Kulavan and Dingan catching birds, their reunion with the Kurathi who comes back with a load of precious presents, and the happy wedding of the hero and heroine. There is a Kattiakkaran (herald) who announces the characters and events. Excepting him, all the others who take part in the play are women. The hero does not appear on the stage but is only spoken of. The heroine has her Sakhis (Playmates) who may number up to eight. In some Kuravanjis (Viralimalai Kuravanji, for instance) there are two Kurathis for the sake of symmetry in dance and effect in spectacle. The heroine who pines for her lover is given ample scope to portray 'sringata bhava' in its many facets. She blames Manmatha (Cupid), the Moon, the Southern Breeze, the Cuckoo, and entreats her Sakhis to bring her lover to her. 'Vipralamba sringara' at its best is portrayed on the stage in these situations. Now comes the Kurathi who is the darling of all, the masses and classes. Her character in the Kuravanji is presented on a highly idealised level. She is a 'deivaloka kurathi' a (heavenly gypsy). Her dance and song belong to the semi-classical or stylised folk art much in the same way as Kavadichindus are in the hands of classical singers. It must be remembered in this connection that the dancers who dance the part of the gypsy are all people who are trained in the classical form of Bharatanatya. We see stylised folk-steps in the dance of the Kuravan and Kulavan also. There are special jatis and Tirmanams for these folk steps. The Kuravan's prances, gestures and facial expressions remind us of those which we come across in Karagam and similar dances.

On the musical side too there is a happy blending of the classical and the folk. Almost all the classical ragas figuring in Kuravanji are capable of bringing forth the intended rasa-bhava. Now rare ragas like Ghanta, Ahiri, Kurinji and Nagavarail occur often. The talass commonly used are Adi, Misra Chapu, Trisra, Eka, and Khanda Chapu. Musical forms used are Kenni, Chindu, Kirtanam, Oradi Kiratanam and Daru, and literary forms used are Viruttam, Asiriyappa and Venba.

Kuravanji performances were performed as all-night shows, in or in front of temples during special occasions. Except in the Tanjore temple (Brihadiswara Temple—where they used a platform) there is no raised stage, or Curtain. A simple piece of cloth called the 'tirai-cheelai' held by two persons was used to bring characters and present them to the audience. This is done in a very artistic manner, creating suspense and thrill in the beginning, by presenting 'close-ups', so to say, of the dancer's face or feet as the occasion may demand. The cloth is then removed, and the dancer is presented fully to the audience. The Tirai-cheels is used also in Yakshagana, Kathakali, Bhagavatamela and Terukkoothu.

The orchestra is the same as the one used in Bharatanatyam—the Chinnamelam. It consists of mridangam, mukhavina and talam. The Preceptor, called Nattuvanar, recites the jatis and tirmanams. While he also sings the introductory songs such as Todayamangalam, there are women who sing the other songs.

The Kuravanji named after Viralimalai has had an unbroken tradition of practical exposition for nearly two centuries. On Mahasivarathi night every year, till some 15 years back, they used to play the Kuravanji as an all-night show, to large admiring crowds of nobles, officials and ordinary folk, in front of the Mandapam below the foot of the hill. Almost every devadasi family of the place had a manyam for dance, and two in particular had special additional manyams for the Viralimalai Kuravanji. It was their business to keep alive the tradition of the Kuravanji, which they did until they were forced out of it owing to socio-legal changes.

The present generation of devadasis having emigrated, or not having learnt the art at all, the songs, their music and the dance today live just in the memory of a very few old women who had taken part in the play years ago when they were young maidens. There was, however, a 60 year old manuscript containing the text of a major portion of songs. It was after much difficulty that I was able to collect and collate all the available materials, persuade the women (Annamal, the oldest of them, in particular) and a Nattuvanar to sing the songs for recording on tape and thus succeeded in preserving the music as well as some of the Jatis and Tirmanams. The presentation by me of this Kuravanji, as an authentic research piece, at Madras in December 1958 had, I am glad to say, a favourable reception.

The hero of this Kuravanji is a mortal human being, but that fact was almost forgotten by all the people concerned, because of the identity of name between him and Subrahmanya, the Presiding Deity. This Subrahmanya Mudaliar appears to have been a famous patron of the arts, for he is highly praised and described as 'Mantri' (Minister) in the work itself. His actual office, however, was that of the Second Administrative Officer in the Pudukkottai State during the latter part of the reign of Vijaya Raghunatha Tondaiman (1730-1769).

The author of the work is unknown. The date of the work (around 1750) places it in the pre-Tyagaraja period and, as such, is of great interest in regard to the ragas and melodies used therein. Besides the references to Subrahmanya Mudaliar, there are also references to his father Ekanatha Mudaliar and to King Vijaya Raghunatha in the work. His ancestry is traced to Sekkizhar the great Tamil poet who sang Periyapuranam.

The coincidence of the names of the minister and of the local deity (both being Subrahmanya) has served as a factor in elevating the tone in the presentation of the Kuravanji. The dancers, practically all of them have been under the impression that the hero was God Subrahmanya, himself.

The Kuravanji begins with Kaappu and Thodayam which are invocatory songs in Gambheera Nata sung by the Nattuvanar.

This part ends with a Mangalam in Panthavarali, which is a tradition mangala raga. There is then the Agaval, sung in Punnavarali which is followed by the dramatic entrance of the heroine Rajamohini. She dances to the song *Rajamohini Aasaiyaagi Vandaal* in Thodi which is a piece of rare beauty set in the Krithi form. There are Jatis and Tirmanams which add lustre to the song. The songs that follow portray Rajamohini's love-lorn condition. Her appeals to the Moon and to Manmatha in Ahira raga, her address to the Sakhi in Kuringi and her pathetic description of her plight in the song "Moha vikaramaaginen" in beautiful Asaveri, all create the sombre effect of Vipralambe-Sringara. The song, *Vandaal Suradavalli* in Madhyamadi and the Samvada Daru, *Suradavalli Maane* in Mohana, which follows introduce a cheerful mood, which is heightened by the entrance of the Kurathi. In the heyday of this Kuravanji there were two Kurathis in the place of one, and they delighted the spectators with their song, dance and scintillating wit.

The Kurathi's songs are in Kuringi, Nandanamakriya, Saurashtra, Nattai, Anandabhairavi, Punnavarali, Mukhari, Manji, Behag (without Pratimadhyama), Chanta, etc. With the introduction of Singam and Chinna Singam (instead of the usual Kuluvan) the songs take a more rustic character, abounding in rhythmic phrases like 'Thandana Thana'. Their dance too is of the folk type.

Kapilai Natakam.—On another dance-drama of Pudukkottai, the *Kapilai Natakam* (composed by Kesava Bharati of Sendamangalam), the same writer observes¹ :

Kapilai Natakam is the story of the cow of Vakularanyam. The cow which used to go daily to the river Ganga and get water in her two ears for performing 'abhisheka' for a Linga in Vakula forest, so the legend goes, was one day, stopped by a tiger. She pleaded for time and promised herself as prey to the tiger on her return after performing Abhisheka to the Lord. When she did return, she was rewarded by a darshan of the lord, in place of the tiger. The cow attained moksha then and there and from that day the place came to be known as Tiru-go-karnam, now part of the modern town of Pudukkottai.

¹ Unpublished dissertation, 1961.

The day on which the cow attained moksha was in the month of Avani, in 'moola' nakshatram. The 'Avani Moola Uthsava' at Tirugokarnam is a grand yearly festival.

The story in a dramatic form is said to have been composed by Kesava Bharathi of Kudimiyamalai. The play is in Tamil and contains darus, Viruttams, dialogues, etc. It was composed more than 100 years ago and was performed in the Tirugokarnam temple on the 'Avani Moola' day every year in a simple manner. It is said that two characters, one appearing as a cow and the other as a tiger, used to stand and perform simple 'Abhinaya' before the deity while the temple gurukkals and dancing girls sang the songs. When songs relating to the 'prathyaksha' of God were sung, the deities Gokarneswara and Brihadambal were brought out and the natakam ended. The performance used to be heard in the evening when large crowds gathered to witness it. The tradition was carried on till the end of the reign of Raja Ramachandra Tondaiman (1838-1886). It stopped during Marthand Bhairava's Reign (1886-1928). The songs of the play however continued to be sung by the traditional singers. When Sashiah Sastri was the Diwan-Regent of Pudukkottai (1878-1894), he ordered that the *Kapilai Natakam* songs should be taught to children in schools for Kummi and Kolattam. Thanks to him there are now old ladies belonging to Pudukkottai and its surrounding villages who can sing the songs of *Kapilai Natakam*."

Pudukkottai in the Cinema.—Pudukkottai has been associated with the growth of Tamil cinema from its earliest days.

One of the stalwarts of the 'silent' era in Tamil films, P.K. Raja Sandow hailed from Pudukkottai. A passion for gymnastics and physical culture (which had earned him the name 'Sandow' drove him to leave Pudukkottai for Madras in the hope that he would, in the big city, be able to make a profession of his interest. Bombay, already a filmdom during the early twenties was in need of 'stuntmen'. Sandow promptly moved on to Bombay where he joined the National Film Company in 1923 as a 'stunt' actor, switching over to Lakshmi Pictures in 1925 where he made a great name as a character actor. Raja Sandow shortly there after ventured to direct films. *Orphan Daughter* (1926) established him as a director.

He continued to act, of course, his role in *Mother India* (1929) marking the peak of his career as a silent-film actor. He acted in lead roles against luminaries such as Gauhar and Shanta Apte. By the time the 'talkie' era overtook silent films, he was fluent in Hindi, Marathi and Gujarati. He continued to direct films in Hindi.

During the early years of the Tamil cinema, groups of artists went to Bombay and Calcutta for film-making. The TKS Brothers' drama group was taken to Bombay by the Tirupur Shanmugananda Talkies. Their film was made in Ranjit Studios where, at that time, Raja Sandow was working as a director on a monthly salary. This film, one of the earliest with a contemporary theme, was done in one month and brought fame to Sandow in the world of Tamil films. Encouraged by this, he returned to Madras and set up his own producing company called Janaki Pictures.

Well versed in classical literature and familiar with grammatical works like the *Tolkappiyam*, he set down to write scripts for films—a field in which he had not hitherto tried his hand. *Vasantha Sena* (1936), which he scripted and directed, in addition to playing the lead role in, was a landmark in Tamil cinema. Hitherto cinema had merely been a vehicle for songs. Sandow gave importance to the spoken word. His own role in the film as the mad prince Sakaran is still remembered by veterans. Another social *Chandrakanta* (1936) had a reformist theme and proved popular.

Sandow emphasized acting as opposed to a mere ability to sing. This itself was revolutionary in that era of songs. He was an excellent coach in acting and had complete control of the movie in which he was working. He was a strict disciplinarian and his contemporaries often compared him to the ring-master of a circus. Unfortunately, none of his movies have been preserved.

He died of a heart attack in Coimbatore, where he had settled down after his return from Bombay on the 24th of November 1944.

Another notable film personality from Pudukkottai was Pudukkottai Ulaganathan Chinnaswamy, better known as P.U. Chinappa. He was born in 1915 in Pudukkottai. His father



A ' still ' from the film Kannagi (1942) depicting Pudukkottai Ulaganathan Chinnaaswamy
(P. U. Chinnappa) as Kovalan.

Courtesy : National Film Archives, Poona

Ulaganathan Pillai was himself a popular stage actor and so even as a child of 8, Chinnappa joined a boys company at Madurai. After working there for 6 months, he went over to the Madurai Original Boys Company, the training ground for most of the famous film actors, which was then camping at Pudukkottai. He became well-known as a singer when the company was playing at Madras, and some of his songs were released in gramophone records. During his early teens, when his voice underwent a change, he had to leave the drama company. He then went to Pudukkottai where he learnt classical music as a disciple of Nannaya Bhagavathar and Karaikal Vedachala Bhavathar. He also got training in gymnastics from Pudukkottai Ramanatha Achari. Here he learnt *Sillambam*, boxing, weight-lifting and even the difficult arts of boomerang and *surul-kathi*. He started a gymnasium and a drama company of his own and also worked as a 'special' drama actor (one who gets invited for specific roles in certain dramatic performances) and kept in touch with the commercial stage, along with the famous dramatist Kandaswamy Mudaliar.

His association with Kandasamy Mudaliar earned him a role in Jupiter Pictures *Chandrakama* (1936). He had already become famous in the stage version of this story and he played the same role in the film also. In 1938, he acted in two pictures produced by Mudaliar, *Punjab Kesari* and *Anadaipenn*. For two years he did not act and in 1940 he featured as a hero in *Udamapuram* which made him a star. His popularity as a versatile star-actor, singer and stuntman -was established in *Manonmani* (1942). He continued to act in plays also. Fame and success brought wealth. He began to acquire houses in Pudukkottai with such rapidity that the Darbar ordered Chinnappa not to purchase any more houses in Pudukkottai. He died in 1951, his last film *Sudarshan* was released posthumously.

Chinnappa will be best remembered for his portrayal of Kovalan in *Kannagi* (1942). He made his appearance on the cinema scene when the only qualification for an actor was an ability to sing. Chinnappa not only sang classical music well, but demonstrated how the quality of a film can be raised by being concerned about acting also. His experience as a gymnast stood him in very good stead in fighting sequences, which formed a necessary ingredient of Tamil cinema, even in the forties. Therefore, as an artiste, who

combined these three features, Chinnappa is unique in the history of Tamil cinema. Another aspect of Chinnappa's work that earned him fame was the way he rendered Tamil dialogue, clearly and expressively. This is particularly evident in *Kannagi*, for which the script was written by Ilangoan, earliest of the modern script-writers. This film is being preserved at the National Film Archives, Poona.

Apart from these two established contemporary artists of the Tamil cinema from Pudukkottai are A. V. M. Rajan and Gemini Ganesh, both of whom have acted in scores of films. Rajan's roles are generally cast in religious moulds and Gemini Ganesh's in romantic. Pudukkottai-born writers Akilon and P. Nilakantan have had their stories done into successful, Tamil films, of which the former's *Pavai Vilakku* and the latter's *Naam Iruvar* deserve special mention.¹ Nilakantan has, subsequently become more famous as a director of films.

Islamic Monuments and Festivals

The Muslims of this District belong to the Sunni sect. The majority of them belong to the class Hanafi. The rise of the Muslim population in this area was occasioned by frequent Muslim invasions. They are heard of in the tract from as early as the 15th century.

The Tondaiman rulers of Pudukkottai made donations for the celebration of the Ramzan and Moharram. A special cess was collected for the Ramzan called 'Ramzan Pandigai Vari' and was remitted to the Raja who sent it in turn, to the Nawab of Arcot. The Pudukkottai State seems to have attracted a number of Muslim saints, some of whom lived and died there. Their tombs are revered to this day. The Darbar made liberal endowments to many dargahs and mosques. As elsewhere, the Muslim monuments in this district consist of mosques and dargahs. A mosque or masjid means, literally, 'the place of prostration', where namaaz

¹ For the paragraphs on Raja Sandow and P. U. Chinnappa above, are grateful to S. T. Baskaran, Member Tamil Nadu Advisory Board of Archaeology and Fellow of the Tamil Nadu Council of Historical Research,

is performed. In general, the essential components of a mosque are as follows :—

- (a) Sahn or a court-yard ;
- (b) Liwan or cloisters ;
- (c) The cloisters on the Mecca side (In India, on the west) of the court-yard, expanded and elaborated into a pillared hall or sanctuary with a wall at the back containing a recess or alcove called mihrab indicating the quibla or direction for prayer. The Mullah stands in front of the mihrab and leads the prayer ;
- (d) On the right side of the mihrab stands the pulpit from where the Mullah teaches Quoranic laws and the teachings of the Prophet ;
- (e) Minars and small towers Minarets ;
- (f) A small tank in the courtyard.

A Dargah is, generally, the building containing tombs of Muslim saints, Pirs, Walis or Oulias where flowers and fruit are offered. In many dargahs both Muslims and Hindus offer prayers for the fulfilment of vows. The vows, fulfilled, are followed by offerings of grain, money, cloth. The votive offerings include symbols of the eye, ear, nose, hand, stomach, in various metals (from gold to tin). These votives are curiously enough, the same as those offered to the goddess Mariamman. The annual memorial days of these saints called the 'Urs'. They are celebrated in a grand manner when a large number of Muslims and Hindus gather and offer prayers. The highlight of the function is that a pitcher with sandal-paste is taken round the streets in a decorated cart with a high tower (koodu) and, at the end of the procession the sandal paste is applied to the tomb of the saint by the Mullahs and Moulvis.

The district muslim monuments include the following :—

Alangudi.—Alangudi has a mosque constructed with granite. The pillars resemble those of the seventeenth and eighteenth century while the minaret seems to be a late construction. This mosque was repaired and an annexure was constructed to it, some four years ago. There is a tomb inside this mosque, of Makka Sahib, a divine. Near the main bazaar at Alangudi, there is the

dargah of Syed Hussain. Offerings take place here on festive days, but no Urs. There is also in Alangudi the tomb of Fakir Sahib Waliyullah, popularly called Araikkasu Dargah. The Urs here takes place in the month of Dulhayidha.

Arantangi.—There is a big mosque at Arantangi with tall minars and minarets. This mosque is popularly called Mohideen Andavar Pallivasal and was constructed and opened for worship in 1950. In the Vannankulam at Arantangi, there is the dargah of Madarsa Aullia. According to a copper plate grant, a ruler of Arantangi in 1802 endowed lands to this dargah. Urs was celebrated here until 1942. Now only the annual 'Kanduri' takes place in the month of Jannathul-Avval. On that day, sandal paste is taken in a procession and applied to the tomb of the saint. The poor are fed on that day. In the market, there is the dargah of Shaikh Mohammad Aulia.

Arasarkulam.—The mosque here was executed in a grand style and opened in Hijri 1393 (1973). The minars are very high and are designed in the same style as that of the Juma Masjid at Delhi. There are also minarets. This is perhaps the mosque with the highest minars in this district. There is a dargah for Shaikh Ismail Sahib on the road to Subramaniyapuram. No Urs takes place here, but the annual Kanduri is observed in the month of Safar. It is believed that Shaikh Ismail Sahib had come to these parts from Arabia to preach the religion. Many heroic deeds are attributed to him.

Ammapattinam.—There are two mosques in this village. Both of them have been renovated in recent years with imposing minars and minarets.

Kottaiappattinam.—There are three mosques here of which the bigger one is the Juma Masjid which was modernised some five years ago. The minars are executed in an imposing style. A dargah here contains the tomb of Syed Mohamed Rowther Sahib Waliyulla. It is said that this saint was living in this place 300 years ago and was a prominent merchant. His father Syed Abdul Aziz Sherkhan was a general under the Nayaks of Madura.

This saint Rawther Sahib was a general under Tirumala Nayak of Madurai (1623—1659). He was so honoured with the title 'Kilethar Hasin'. He later became a merchant and settled at Kottaippattinam. Many miracles are attributed to him. The dargah was repaired in recent years with big domes, minars and minarets, being added to it. The Urs here, which takes place in the month of Safar, is very famous and thousands of devotees, both Muslim and Hindu, participate and offer prayers. The saint's wife, Kooniammal alias Shaihammal Nachiar also lies buried by his side.

Perunavalur.—There is a mosque here with minars and minarets. The dargah here contains the tombs of two saints by name Nannappa and Kalandhar Mydeen, father and son respectively.

Annavasal.—There are two mosques at Annavasal, of which one is called Nawab Palli. The Nawab Palli is constructed entirely with granite. The pillars in this mosque exhibit the characters of the pillars of the temples of the seventeenth and eighteenth century. According to local tradition it is said that this mosque was built in the middle of the 18th century when the Nawab of Tiruchirappalli, halting here on his return from Madurai where he had gone to defeat Shan Sahib, found no mosque in which to worship and ordered one to be built with the materials taken from a ruined temple at Erukkunaniapatti in Iluppur village, sanctioning 400 'pon' for its construction. It is also that he later endowed lands for the maintenance of this mosque. The other mosque, which is bigger than the Nawab Palli, was constructed in the year 1946. On the southern side of the Nawab Palli there is the tomb of Pattani Sahib Aulia, which was constructed 163 years ago.

Andakkulam.—There is a big mosque here with minars and minarets. There are also two dargahs. The tomb of Syed Mohamed Aulia is venerated much by Muslims and Hindus. A native of this village, he lived for sometime at the court of the Nawab of Tiruchirappalli who had a high regard for the Aulia's saintliness. As an illustration of his occult powers it is said that he predicted the death of the Nawab. An Urs takes place with great pomp and show. There is another tomb here of a Muslim saint by name Thaikkal Bava.

Iluppur.—There are two mosques at Iluppur, of which one is called the Nawab Palli. Very old, it is constructed with granite from basement to final. The pillars are ornamental and exhibit the characters of the pillars of 17–18th century. It is one of the old mosques in this district and believed to have built on the orders of the Nawab of Tiruchirappalli.

There is another mosque here which was constructed 75 years, ago, with tall minars and minarets. It was modernised in the year 1935.

There is, here, the dargah of Simil Peer Aulia whose memory is much venerated. According to local tradition he came from Jabalpur for preaching the Islamic religion.

There is another dargah here of a saint, Sanchi Meera Aulia. A native of this village, the saint, once when there was an acute famine in this area, prayed successfully for rain and for the soil's fertility. There is yet another dargah with the tomb of Udamankulathu Aulia, on the banks of Udaman Kulam.

Latchampatti.—There is a mosque here with a hall and a hexagonal room and a couple of minarets. An inscription in the village refers to an assignment of lands in 1788 by Raya Ragu-natha Tondiman to Ahmed Shah Iman of this mosque, on the orders of Nawab Umdat-ul-umara of Tiruchirappalli.

Mukkonamalaipatti.—The mosque here where the regular Namaz takes place is one of the finest mosques in this district. Perhaps this is the mosque with the greatest architectural value. The pillars here resemble temple pillars of the 17th century. They are carved exquisitely. The mosque is constructed with granite from basement to finial. The minarets are also designed in the style of the 17th century. There is another mosque here, the Mohideen Andavar Mosque, on the Mohideen Andavar hills (formerly called Mukkonamalai) which was constructed some 75 years ago and is used as Idgah. The Ramzan and Bakrid Namaaz take place here.

Narttamalai.—On the Melamalai hill at Narttamalai, in a natural cavern, is the tomb of a Muslim saint, by name Mohamed

Masthan. His memory is highly venerated by both Muslims and Hindus. It is said that he was an efficient physician, who came from North India for preaching the Religion and lived in this hill since the Narttamalai group of hills contains a lot of medicinal plants (even to this day). The Urs takes place in April on the 10th day of the Narttamalai Muthumariamman festival and this marks the end of that festival. A large number of Muslims and Hindus congregate here and offer prayers to this saint without any religious differences.

Oduvampatti.—There is a mosque in this village. The tomb of Pir Sahib here is one of the important dargahs in this district, whose memory is much honoured. The Urs takes place in the month of Rajab.

Pirampatti.—This village is a hamlet of Keelakkurichi village. There is here the tomb of Arisi Pakkir Aulia. It is said that the tomb is 200 years old. The Muslims and Hindus of this village, during harvest time, present a bunch of grain herb (Ari) for the Kanduri of his Aulia.

Puduvayal.—This is another hamlet in the Keelakurichi village, and contains the tomb of a Muslim saint by name Nallakani Bava. Offerings to the tomb are made mostly by Hindus.

Thayinippatti.—Situated on the main road leading to Keeranur, there is here the tomb of Nondipakkirisa, where offerings are made both by Muslims and Hindus.

Vennangudi.—There is a tomb in this village which contains the bones of Shaikh Mohamed Aulia (1768–1818). The Shaikh a native of this village was deeply religious. Many miracles are attributed to him and his memory is much honoured.

Panampatti.—There is a tomb here of a muslim saint by name Vellai Bava.

Veerappatti.—Situated on the Annavasal–Iluppur main road this village has the tomb of a saint by Vellaiyappa Sahib.

Sathram.—This is a small village on the Annavasal–Iluppur road, and has the tomb of a saint by name Pakkir Mohamed Oliyallah.

Enappatti.—In this village is the tomb of a Muslim saint Sayid Ollyullah, who believed to have come from Arabia in the 17th century and died here. In about 1850, the villagers when digging an urani discovered his bones and built a tomb. The Kanduri is celebrated by the Hindus of this village.

Pallivasal.—The full name of this village is Kaattubava Pallivasal the tomb of the 'forest father'. This is one of the important dargahs in the district and attracts a large number of Muslims and Hindus. In the seventeenth century, a Muslim saint, Sayyed Fakhruddin Auliya, after renouncing the world, wandered in Arab countries and came to South India. During the course of his journey he halted near Tirumayam. Tradition has it that once six women with two children, who were going to their native village (Vayalur on the banks of Vaigai) from Pudukkottai after receiving gifts from the Tondaiman of Pudukkottai, who used to gift liberally on the day of Purattasi Mahanombu (Dasarah), sought the protection of the Bava, who escorted them through the jungles. On their way, a gang of fourteen robbers attacked the women and the Bava. The Bava killed seven of them and the rest fled and hid in the bushes. One of them threw a spear on Bava, whereup all the seven robbers lost their eye sight. When the robbers repented, the Bava restored sight to one of them and asked him to conduct the women to their native village, promising to restore sight to the others also after his return. This done, the Bava died. (The place of this incident is called Vettupparai near the dargah). The father was thereafter given the name 'forest father' or Kattubava. The small tank called the Papathi Urani near this place is believed to have been constructed by the Brahmin women who were protected by the Bava, a few years after his death.¹

The present shrine containing the tomb which faces south is the gift of Muhammad Ali Walajah, the Nawab of the Carnatic; and to the right of it is a mosque. All round the dargah are cloistered halls. Over the tomb is a minar or dome surrounded by minarets. The Tondaimans of Pudukkottai, the Wallajahi Nawabs of Trichinopoly and the Setupatis of Ramnad made rich endowments to the shrine. An inscription on a slab in front of the tomb,

¹ The above account is taken from the Tamil poem, *kathubava karaniham* composed in 1930.

dated in the Tamil year Datu (1696 A.D.) records an order of Ranasinga Thevan, son of Ratta Kaghunatha Tevan, better known as Kilavan Setupati, to one of his officers granting to the dargah two tanks with the surrounding fields. Like the famous dargah at Nagore, Pallivasal is visited both by Muslims and Hindus, and the annual urs is celebrated in the month of Rabiul Aahir.

Sethurappatti (near Tirumayam).—There is a tomb here of a Moula Islam (one who converted to Islam) Saint. It is said that this saint was a Nattukkottai Chettiar and became the disciple of Muslim saint, Karutha Fakkir Sahib, who lived 100 years age at Tirumayam. The Nattukkottai Chettiars of this area worship this saint with great veneration. It is said that the descendents of this saint prefix 'Karutha' to their name.

Tirumayam.—There is a mosque here which was constructed in the year 1920. There are, also, four dargahs. On the Tirumayam-Madurai road is the dargah of the Muslim saint by name Khadar Ibrahim Aulia. He was a native of Tirumayam and died in the year 1926. The dargah was constructed by two of his disciples, Ramasami Asari and Samiar *alias* Abdul Rahiman (Moula Islam). Many miracles are attributed to him. It is said that once there was an outbreak of fire in this village and on seeing it this saint put some sand on the flaming houses putting it out. The dargah is constructed with dome and minarets.

On the Pudukkottai-Tirumayam road on the southern banks of the Tamaraikkanmai (near the fort) is the tomb of Syed Sahib Wali Aulia, who is believed to have come from Arabia.

On the northern banks of Karungulam are the tombs of two Muslim saints who also, according to tradition had come from Arabia. The tomb (quabr) is surrounded by small wells. These saints are popularly called the Karungulam Aulia.

On the Tirumayam-Madurai road on the banks of Alankanmai, is the tomb of one Nannatha Sahib.

Tulaiyanur.—Situated on the main road leading to Madurai, there is here the tomb of a women saint Pappathi Ammal who lead an ascetic life.

Puthambur.—There are two mosques here of which one is older, with large minars and minarets.

There are two tombs. The tomb of Hazrat Sultan Ahmed Kabir Aulia, who is believed to be a descendent of the Khalif Abubakar, is held in great reverence and the Urs takes place in the month of Rajab. There is another tomb of a saint, Peer Sahib, and the Urs to this tomb takes place in Dulhaj.

On the Pudukkottai-Puthambur road is the dargah of Rahimabee Ammal.

Pudukkottai.—There are five mosques, one each at Tiruvappur, Adappanvayal and Khalifathullah Nagar and two at Pudukkottai Town. The large Juma Masjid at Pudukkottai Town (near the market) is about 200 years old. The minar and minarets are imposing. It contains all essential parts of a mosque. There are three dargahs. The dargah of Hazrat Syed Shah Parhezi Aulia is held in great veneration by the Muslims and Hindus of the town. Parhezi Aulia, a prince or chieftain of Yemen renounced the world and wandered the countries of South West Asia and at last settled at Pudukkottai in the latter half of the seventeenth century. Many miracles are attributed to him. His saintliness attracted the notice of the Tondaiman rulers who held him in high esteem and had a tomb raised in his honour after his death. It is believed that his nephew and disciple also lies buried by his side of the Aulia. The Urs takes place in a grand manner. The tomb of Jatcha Beebi, a Muslim lady who led an ascetic life is situated on the north bank of Nainari tank. In the South Third Street, is the dargah of Badesa Sahib, who renounced the world in young age itself.

Vayalogam.—There are two dargahs here. On the northern banks of the Dargahkulam there is the tomb of Syed Mohamed Aulia who is believed to be the son of Shaik Dawood Aulia of Mutpet. He was a physician. The buildings to this tomb was constructed in the year 1953 by a devotee from Alangudi. There is another tomb of Mohamad Gani Aulia, who is the son-in-law of the former. The buildings to this tomb was constructed by one Abubakkar Rowther of Pudukkottai in the year 1974. The Urs to both these tombs takes place in the month of Rajab.

There are smaller mosques in the following places in the district: Karambakkadu, Karambakkudi, Kulandaivinayakankottai, Puduviduthi, Tiruvarangulam, Vallattrakkottai, Vadakkadu, Araseneri, Avudaiyapattinam, Ayeepattinam, Gopalapattinam, Jagathapattinam, Kattumavadi, Karanikkadu, Kolanthram, Krishnajipattinam, Manamelkudi, Mopanaikkadu, Ponpethi, Pudur, Puthukkada, Puduppattinam, Pothaiyankudiyiruppu, Rajendrapattinam, Rathina-kkottai, Sengarai, Seetharamapattinam, Vadakkampattinam, Kulattur, Keeranur, *Mangathevanpatti*, Mangudi, Perumanadu, Parambur, Kaladippatti, Vathanakkurichi, Arimalam, Karaiyur, Melathaniyam, Mirattunilai, Onangudi, Malaikkudipatti, Ponnamaravathi.¹

Christian Churches and Festivals.—A survey of the Christian churches and the properties owned by them appears to have been conducted by the Pudukkottai Darbar in 1852. A copy of the survey report pertaining to Kulattur taluk is found in the index to a volume prepared in the year 1888 in connection with the Settlement of Inams by the Pudukkottai Darbar. This mentions the villages where churches were existing, the extent occupied by them, the description of the building (whether it is terraced or tiled or thatched), the properties owned by the church, the rent paid to the Government, the manager of the church, the diocese to which the church belonged, and other particulars. According to the above account there were at that time:

1. 22 churches of which 2 were tiled and 19 thatched.
2. 12 sheds of which 2 were tiled and the rest thatched used by the churches.
3. 4 Uranies owned and maintained by churches.
4. One school run by a church.

All these churches belonged to the Catholic Mission and were under the control of the Bishop at Tiruchirappalli.

¹ For the above paragraphs on the Islamic monuments and festivals of the district, we are grateful to J. Rajamohamed, Curator, Government Museum, Pudukkottai.

Catholic churches were in existence in 1852 in the following villages of Kulattur taluk :

Avur, Malampatti, Kolattur, Kattampatti, Melur, Neerpalani, Lechchamanpatti, Sengulur, Melapatti or Sengalur, Kannagudi Ramadayanpatti, Ravuspatti, Mallupudayanpatti, Chinnawranipatti, Muthupatti, Vellalapatti, Piliyur, Thirumalarayapuram, Motayanpatti, Killukottai, Nanjur, Savariapattinam, Keelapatti of Vellur, Marudandalai.

The Easter festival at Avur attracts large crowds from far and near every year. The festival commences on Monday, Thursday and comes to a close with Easter Sunday. On the nights of Thursday, Friday and Saturday, a 'Passion' play is staged in the Basque Mandapam, depicting episodes from the life of Jesus, the Last Supper, the Trial, Crucifixion and Resurrection. On Sunday there is a 'car' festival when the wooden car or *ther* made exactly like Hindu *thers* but with Christian images, is taken round. The festival is attended by nearly 20,000 people.

There are churches at Pudukkottai, Kottaikkadu and Mangarur (Alangudi and Pudukkottai taluks) and at Kammangudipatti in Tirumayam taluk. At the church at Mangarur, a big festival is held as at Avur. There are Protestant Churches at Pudukkottai town, Koltai-karpatti and Samudrappatti.

Journalism and Literature.—Literary activities quickened in the Pudukkottai area in the early decades of this century. The Tamil author Akilon ascribes¹ the impetus to Nattukkottai Chettiar patronage. Pudukkottai being close to the Chettinad, and there being within the former State's Tirumayam taluk itself several Chettiar villages, the community's interest in reading and publishing (if not writing itself) influenced Pudukkottai. Another, more pervasive, factor responsible for Pudukkottai's literary 'birth' was the nationalist movement. Chettinad money and patriotic fervour may, therefore, be regarded as the twin harbingers of a literary renaissance in Pudukkottai.

In the early '30s' some Nattukkottai Chettiars approached Shuddhananda Bharati, then leading the life of a recluse at Pondicherry with an invitation to publish his writings from Pudukkottai.

¹ In an interview with the Editor on 12th December 1974.

From the Anbu Nilayam at Ramachandrapuram, Tirumayam taluk, therefore, emanated over a hundred of Shuddhananda Bharati's works such as translations into Tamil of Victor Hugo, collections of his own poems and essays. The latter were not overtly nationalistic but had, according to Akilon, "a political flavour"¹ Nattukkottai Chettiars thus, unwittingly perhaps, played a role in the fostering of political consciousness in Pudukkottai.

Another involuntary source of assistance for the literary renaissance was the Pudukkottai State itself. In the War years paper was in short supply in British India. But Pudukkottai was not British India. The administration of Sir Alexander Tottenham, never found wanting in the matter of supplies, had ensured that Pudukkottai would have no paper problem. A succession of Tamil journals—all ostensibly non-political—made their appearance in Pudukkottai. *Thaai Naadu* was started in the year 1941 as a monthly and was printed at the Co-operative Printing Press, Pudukkottai, with K. Narayanan as Editor. The price of the magazine was 4 annas. The magazine had about 48 pages devoted to articles, stories, editorials. *Tirumagal* was a fortnightly magazine also printed at the Co-operative Printing Press, Pudukkottai. It was edited and published by S. Ramaswamy. Later Rama Marudappan edited this magazine and Rasi Chidambaram Chettiar published it. In the beginning its price was one anna. On becoming a monthly from 15th February 1942, its price was raised to two annas.

Tirumagal lived till the year 1943. It carried editorials, news items, short stories, children's pages and essays, and was a very popular magazine. *Chandrodayam* was another magazine published from Pudukkottai town at this time with S. Palaniyappa Chettiar as Editor. A fortnightly to start with, it later became a weekly. It was established in the year 1933 and was in existence till 1941. It carried short stories and poems. Pulavar Somasundaram, Rama Marudappan and Ramamritham served in this magazine as Assistant Editors at various periods. *Anikalam* was a monthly that started in the year 1941 with L. Kathirasan Chettiar as its Editor and publisher. Printed at the Kannapiran Printing Works, Pudukkottai, it contained stories, articles and pages for children. This period also

¹ See K. Diraviam's *Malki Memorial Lecture, Desecyam Valartha Tamil* University of Madras, 1974.

saw the emergence of several magazines that more exclusively for children in the Pudukkottai State, such as *Baalār Malar* (1942), *Paappaa* (1944), *Damaaram* (1946), *Karumbu* (1947). Other journals included *Inbam* (1941), *Kalai Vani* (1944), edited by P. Neelakantan, and *Kalai Selvi* (1948).

Before these appeared, some Tamil journals had already got established. *Vidya Bhanu* was the first newspaper to be started in the then Pudukkottai State, in the year 1908. It was published twice a week on Mondays and Thursdays. A Tamil newspaper, it was edited and published by S. Swaminatha Aiyar and AR.RM. Subramaniya Chettiar and was printed at Dhanavysian Press, Konapet, by S. MR. Shanmugam Chettiar. The yearly subscription for this newspaper was Rs. 5 inside India and Rs. 6 8-0 (Rs. 6.50) abroad. For students and women readers, the subscription was reduced to Rs. 4. The *Vidya Bhanu* carried ten pages. The first two pages were usually devoted to general articles and the subsequent pages to Government and other advertisements, news and miscellaneous items. The *Janamitran*, a weekly, was launched in the year 1924 and had as its editor P. S. Visvanatha Aiyar, one of Pudukkottai leading lawyers. Subsequently, one of his other six brothers P. S. Subramaniam assumed the editorship full-time, since besides the lawyer (also Legislative Council member, the other brothers were in service or in other occupation. This was the first newspaper to have been published in Pudukkottai town. In the course of its career, the paper had quite a few crushes with the authorities, details of which have been given in Chapter II. Another nationalistic journal was the *Desa Ooliyan*, a weekly newspaper published from Pudukkottai town by S. Nagaratnam Aiyar and S. Muthukrishna Aiyar. Muthukrishna Iyer resumed the editorship during the inability of Nagaratnam to function so, due to imprisonment and externment. Nagaratnam Aiyar was its Editor. An editorial under the caption “சிறை சென்ற மணி” and “ஐனமித்திரன் அப்பீல் தீர்ப்பு-சில—சிந்தனைகள்” by Kousigan published on 28th November 1927 became the subject-matter of a Full Bench Reference.

The Additional Chief Magistrate had ordered the editor under Section 144 not to publish anything on the question of the succession to the Pudukkottai *gadi* and on the functions relating to the death

of the ex-ruler in the year 1928. The article under the heading “பொறுத்தார் அரசாள்வார்” published in the issue, dated 23rd July 1928 was viewed seriously and, on the orders of the Regent Saheb, the editor was extenuated. Among Pudukkottai-born contemporary writers may be mentioned Akilon, Al. Valliappa and P. Neelakantan.

Born in 1922 at Perungalur of the then Pudukkottai State, Akilon (P.V. Akilandam was) educated at H.H. the Raja's College, Pudukkottai. Even as a student, Akilon participated in the freedom movement (1941-'44). He left the Postal Department in which he was employed to devote his full time to writing. Akilon has been working since 1966 as Producer, Spoken Word Programme (Tamil), All India Radio, Madras. Akilon took to writing in 1938 contributing novels and short stories in leading Madras journals like *Kalki*, *Kalaimagal* and *Ananda Vikatan*.

About 40 books have been published by Akilon in the form of novels, short story collections, essays, plays and stories for children. Many of his works have been staged by leading actors of Tamil Nadu (*Puval*, *Vazhvil Inbam*, translations of Tagore's *Sacrifice*, *Vengaiyin Maindan*, *Nenjin Alaigal*, *Vetriirunagar*). Some of his novels were adapted and filmed for the Tamil screen (*Paavai Vilakku*) and (*Vazhvu Engay*). Akilon's works have received several awards. His novel *Penn* was awarded the prize by *Kalaimagal* in 1946. The Tamil Academy awarded the first prize to the novel *Nenjin Alaigal* in 1955. The latest award received by him is the Annamalai Chettiar Memorial Award for the novel *Engay Pogirum ?*. His historical novel *Vengayin Maindan* won the Sahitya Akademi award in 1963. *Kannana Kannan* won him an award from the Tamil Nadu Government in 1963. *Kaval Vizhi* was awarded, for the second time, the Tamil Academy Award in 1968. *Erimalai*, a collection of short stories, has won an award from the Tamil Development Council in 1973.

Some of Akilon's short stories have been translated into other Indian languages and into foreign languages like English, German, Russian. Some of his novels like *Penn*, *Pon Malai*, *Snehti*, *Paavai Vilakku*, *Nenjin Alaigal*, *Chitrappavai* have been translated into many Indian languages.

Akilon's novels have been prescribed for University courses in the Madras, Annamalai and Madurai Universities. His novels and short stories have been taken up for doctoral research by scholars.

Apart from his position in AIR, Akilon is a Member, Advisory Board, Sahitya Akademi for Tamil (since 1963). He was Secretary, Tamil Writers' Association, Tiruchi (1954-'57) : Secretary-General, Federation of All India Tamil Writers (1961-'65); President, Tamil Writers' Association, Madras (1967).

A well-known writer for children, Al. Valliappa belongs to Rayavaram in Pudukkottai district. Born in the year 1922, Valliappa's early education was at Gandhi Patasala, Rayavaram and his high school education was at S. B. F. High School, Ramachandrapuram in Pudukkottai district.

Ma'arum Ullam was his first book published by Palaniappa Brothers in 1944. Later, in 1954, this work won him both State and National Awards. The book *Nalla Nanban* won the State Award for children's literature. In 1970, his work *Pattile Gandhi* won the National Award. *Sinnanchiru Vayathil Periyar Vazhvil*, and *Pillai Paruvathele* won him State Awards for children's literature. *Ruthirai Chavari* and *Nehru and Children* are illustrated books by Valliappa. So far Valliappa has published about 53 books of fiction, biography and animal life—all for children, in the form of small poems, easy to read and sing aloud. Besides his original creations, Valliappa has translated many English books for children into Tamil. In 1950 Valliappa started the 'Association of Writers for Children' which is the first of its kind in India. So far more than 10,000 poems for children have been written and published by Valliappa.

Valliappa was Honorary Editor of *Pooncholai*, a children's magazine (1950-'54) and of the magazines *Damaaram*, *Sangu* and *Baa'ar Malar*. He is at present an Officer in a Madras bank.

Born in 1916, P. Neelakantan, is another Tamil scholar from Pudukkottai. Neelakantan started, in the year 1941, a Tamil magazine, *Kalai Vani* in Pudukkottai. As its editor he wrote many

articles on the then socio-economic conditions, apart from short stories. Through this magazine Neelakantan, presented the *Kamba Ramayana* in prose. The *Kamba Ramayana* series was brought out in a book form later. Neelakantan's drama *Mullil Roja* aimed at the eradication of the 'devadasi' system and *Naam Iruvar*, a dynamic social drama, have been very popular. Neelakantan has written many stories for films, which include *Vazhkai*, *Vethala Ulagam*, *Naam Iruvar* has also been made into a film.

In 1935 he was editor of *Jeevamani*, a Tamil monthly published from Tiruchirappalli. While serving as editor of *Vijayan*, Neelakantan published the *Mahabharatha* in prose form. Neelakantan was sub-editor of *Kumaran*, another weekly from Karaikudi. He was editor of *Indera* and *Kalaivani* both monthlies. He has reproduced in book form, collections of literary speeches by various eminent scholars and speakers under the title *Inba Pozhil*. At present he directs Tamil films.

Among Tamil publications to have emanated from the pens of other Pudukkottai-born writers may be mentioned *Virumbiya Parisu*, *Guru Arulum Tiru Arulum*, *Gokarna Panchangam*, *Manidan Engeyo Pogiraan* by Vidwan Sri Sai Mata Siva Brinda Devi; *Azhahu Roja* by P. Venkataraman; *Vaazhvu Neri* by M. A. Subramaniam; and *Panditamani Vaazhkai Chitram*, *Poochootal* by Vidwan Tirunavakkarasu.

CHAPTER IV—AGRICULTURE AND IRRIGATION.

Pudukkottai's hard earth has called for deep-ploughing. The scarcity of water has necessitated broadcast sowing. A system of principles founded on observation and experiment has been transmitted among its peasantry down the generations. Pudukkottai has grown on this soil dry crops such as varagu, cholam, cumbu, ragi, apart from paddy.

How many of the practices of husbandry in the tract represent collective prudence and how many dead habit ?

Modern farm technology disseminated from a State Farm and a Research Institute located within the district, assist the farm tradition of centuries in strengthening the inherent assets of Pudukkottai's agriculture and mitigating its liabilities.

Tradition.

In the chapter entitled 'History' it was explained how the area served by the Vellaru came to be brought under the plough, earning the tell-tale appellation of 'konadu' (கொளுடு) or the land of the settled farms.

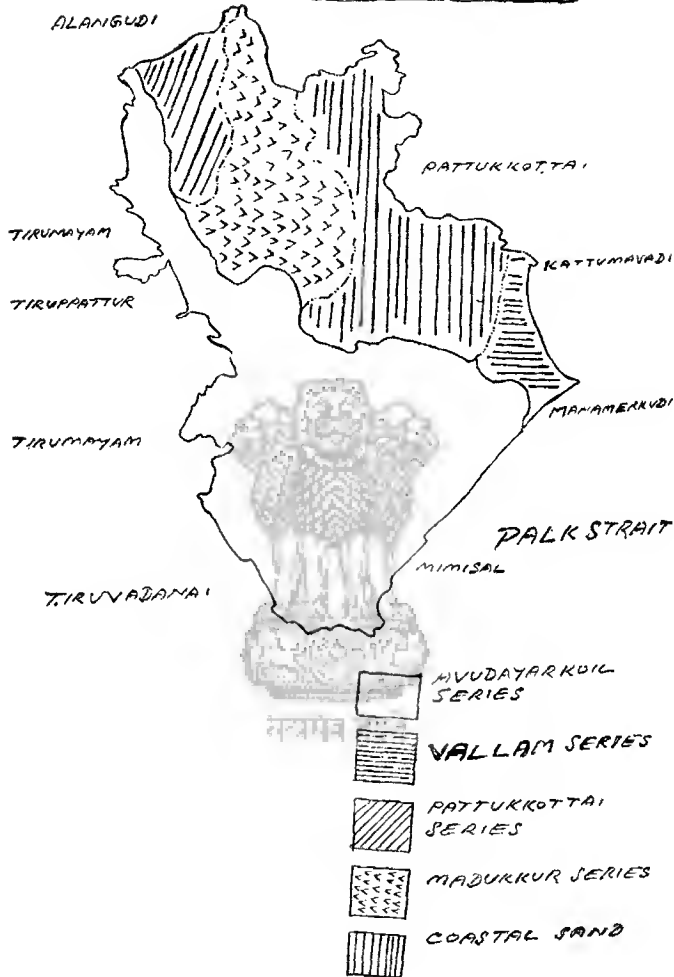
What have the traditions of husbandry in Pudukkottai been ?

Productivity of the Tract.—The first factor that the Pudukkottai farmer has had to contend with has been the difficult soil. None too rich, the lands here have suffered further from the disabilities of poor irrigational nourishment and soil-erosion.

In the terminology of the traditional classification of soils, the chief soil-type in the tract is 'sevval' or the red soil, followed by **karisal** the black soil or regar. The former has preponderated over the latter in Pudukkottai. When mixed with sand the red 'sevval' is called 'maral', and when with gravel, 'saral'. The 'saral' soils have been described as "neither fit for cultivation nor for the pasture of cattle". The value of the black 'karisal' has been found, similarly, to deteriorate when mixed with clay—an unfortunately

1. Letter from the Deputy Poishkar to the Diwan, dated 9th September 18 (Darbar Records, Pudukkottai).

SOIL MAP OF
ARANTANGI TALUK



familiar combination. In parts of Tirumayam and Kulathur taluks has occurred a saline soil 'kalar', which is very ill-suited to cultivation. None of the soil-types described above are what *may prima facie* be called good for cultivation. Except for a rich chocolate loam called 'padugai' in the ayacuts of the Kavinad, Vallanad, and other large tanks. The Pudukkottai tract has been deficient in productivity. Even the 'padugai' soil here has never stood comparison with the silt-fertilized alluvium of the Cauvery delta. Marshes thickly impregnated with lime (ஈழை) and wet lands containing a kind of moss (locally known as வேம்பும் பாதை) have further prejudiced the healthy growth of crops.

Although the modern technique of soil evaluation, the extensive standard soil survey, has not been conducted in the district to group the soils into the modern classificational units, an idea of the major soil groups computed from available records can be had from the chapter on 'Soils' of Tamil Nadu in the book *Soil of India* published by the Fertiliser Association of India. According to the authors, the major zones are (1) Red Sterile soil, (2) River Alluvium and (3) Saline Coastal Alluvium. Broadly the 'sevval' corresponds to the first category, while the 'karisal' occurs in the second.

The estimated extent of occurrence and the characteristics of the soils are furnished below:-

(1) *Red sterile soil*.—These gravelly red soils covering an area of 2,755 square kilo metre correspond to the 'sevval' soil-type and occupy the major portion of the district. The long hot summer prevailing in the area has given these ferruginous soils a burned-out appearance. These soils are best represented by the Vylogam and Vamban series. The soils are slightly acidic with pH ranging from 4.7 to 5.8 and contain total soluble salts in harmless amounts (0.2—0.25 m.mhos/cm). The texture of the soil varies from sandy clay loam (22 per cent clay) in the surface to clay loam (31.02 per cent clay) in the sub-soil. The soils are generally low in cation exchange capacity (4 m.e./100 g. soil) and exchangeable calcium 3 m 2/100 g. soil). The fertility status is low with 0.02 per cent total phosphorus and 0.9 per cent organic carbon.

In the low lying areas where water stagnates during some part of the year the soils tend to become neutral to slightly alkaline as represented by Visalur and Perungalur series (pH 7 and 8.7). The

clay content also increases to clay loam to clayey texture (26 per cent to 50 per cent clay). Total salts are present in critical to injurious amounts (1.5 to 7.5 m.mhos/cm). There is a sharp increase in calcium level with 4.2 per cent calcium.

In the hill slopes and upland areas the soils are shallow, light textured, gravelly and stony and are suitable for cultivation of some interior millets or pastures only. In the other areas red gram and millets like varagu and thenai come up fairly well utilising the moisture built up during the north-east monsoon rains. The other crops that can be tried to advantage are short duration pulses like greengram and blackgram and oil seed crop like groundnut. With irrigation facilities the spectrum of crops may include ragi, cholam and Cumbu. Cashew is another crop well-suited to the soil and can be grown profitably.

2. *River Alluvium*.—The total area under River alluvium which includes 'karisal' soil-types, is approximately 1,536 square kilometre. The soils occur in two blocks. The block in the north eastern part of the district comprises recent alluvium after the formation of the Grand Anicut canal. The soils as represented by Madukkur and Pattukkottai series, have a sandy loam surface (12 to 17 per cent clay) and sandy clay loam to clay loam sub-soil (31 to 35 per cent clay). They are slightly acidic to neutral (pH 5.3 to 7.0) in reaction and contain total soluble salts in harmless amounts (0.2 to 0.9 m.mhos/cm). Plant nutrients are present in low amounts with 0.08 per cent total phosphorus, 0.2 per cent total potassium and 0.12 per cent organic carbon. Cation exchange capacity and total exchangeable bases are also in low amounts of the order of 4.9 to 8.0 m.e./100 g. soil.

Paddy and banana are well suited during the main season. During summer crops like groundnut, vegetables, gingelly, pulses like green gram and blackgram and summer cotton can be grown.

The alluvial block to the south of the district is formed due to the deposition of alluvium by the river Vellar. The soils are characterised by alternate layers of coarse and fine sand along with clay. The soils represented by Avadaiyar Koil series have a clay loam to clayey texture with clay content ranging from 22 to 39 per cent. The reaction is neutral (pH 7.1) to very slightly alkaline (pH 8.6). The area lying adjacent to the coastal alluvium has a tendency to

become alkaline when drainage facilities are inadequate. Water holding capacity of the soil is high (40 to 64 per cent). In nutrient status, these soils are just as good as the soils in the north-east. All the crops recommended to the alluvium in the north eastern part can be advocated to this block also.

3. *Saline Coastal Alluvium*.—These soils occur along the sea coast as a narrow belt and occupy an area of 440 square kilometre. They are formed by the rivers and are overlain with sand blown from the sea beaches. The texture of the soil varies from sandy loam sandy clay loam (12–25 per cent clay) to pure sands (2–3 per cent clay) depending on the variable amounts of sand present. The sub-soil is generally clayey. Drainage is moderately good in the surface but very poor below. The soils are marked by their mild alkalinity (pH 8.5 to 9.4) and high salinity (E.C. 6 to 10 m.mhos/cm). Cation exchange capacity is low being 13.70 m.e/100 g. soil. The soils are low in total phosphorus and lime and medium in total potassium and organic carbon¹.

Coconut comes up very well in these soils. Paddy varieties like PVR 1. can also be suggested for cultivation. Among millets, ragi is better suited than the others. Gingelly also can be grown in these soils.

Soils developed from sandstone, granites and gneisses, as is the case with the soils of the Pudukkottai district, are usually pale yellow, pale red and yellowish red in colour and are of very low fertility. Analysis of typical profile samples for the physical properties and chemical constituents also indicating the nutrient

1. pH is the negative logarithm of hydrogen ion concentration in grams/litre of any solution. In soils it indicates the hydrogen ion activity of the soil at a specified moisture content or soil water ratio. It is a measure of the degree of acidity (or alkalinity) of a soil as determined by glass electrodes. At 1:2 soil water ratio, pH 7.0 is neutral the acidity increases as the pH value decreases from 7.0 and the alkalinity increases as the pH value increases from 7.0. The determination of pH value is essential to recommend the quantity of lime required to correct an acid soil or the gypsum required to reclaim an alkali soil.

Electrical conductivity (Ec) which is a measure of the total soluble salts present in the soil solution and is measured in units called mho/cm. When the concentration of salts is very low it is convenient to express them as milli mho/cm (m.mhos/cm, i.e. 1/1000 of a mho) or micro mhos/cm (mho/cm, i.e. 1/1,000,000 of a mho). The measurement of Ec is important in cases of crops sensitive to salt.

CEC stands for cation-exchange capacity of a soil. It is the sum total of exchangeable cations that a soil can absorb. It is a measure of the capacity of the soil to absorb nutrients and measured in units called milli-equivalents/100 grams of soil (in short, me/100 g. soil).

levels are presented in Tables 2.1 through 2.3. Much cannot be expected from these soils by way of supply of plant nutrients. The bulk of the nutrient requirement has to be met through judicious application of fertilizers for the different crops based on soil test recommendations. Organic matter content is very low in the cultivated lands. Heavy application of bulky organic manures will help in building up the organic matter status, increasing the available moisture capacity of the soil and improving the soil structure.

The soil, moreover, has been a thirsty soil. The Cauvery flowing close, has never entered Pudukkottai. As stated in the first chapter, the tract has known no self-renewing rivers. The rains have been Pudukkottai's only means of watering its fields, a gird of jungle-streams and tanks acting as the conveyor. But with the rains failing so often, the grid has had little to convey. A long-drawn destruction of plant growth (trees, shrubs) in the tank's catchment areas has, in the past, resulted in sheet erosion and the formation of gullies through which drifting sands have travelled and silted up the waterspread¹.

And yet, like the rest of the peninsula, Pudukkottai has been an active agricultural country. The Pudukkottai ryots have been described² as "poor but hard-working" in a 1938 'yadast' by the then Diwan Peishkar. "If it but rains properly", he says, "they manure and cultivate their lands with much labour".

The Farm Mores.—Diligence has characterised the Pudukkottai farmer since early times. We find testimony of this in lithic records. Early inscriptions pertaining to agricultural practices in the Pudukkottai region speak of both wet and dry crops being

1. See Report of Rao Sahib E. V. Padmanabha Pillai, Special Officer, to Advise on the Prevention of Soil Denudation, 1938. (Darbar Records, Pudukkottai) *A Guide to the Pudukkottai State* (1945) informs us: "The Government have undertaken in recent years fairly extensive works for the prevention of soil erosion, which is not merely silting up the tanks but also stripping all the soil off the uplands. This is a very serious problem to which no attention had previously been paid. The work done consists mainly in the erection of rubble dams and earth binds. In some places terracing has been done. Various kinds of grass including the African varieties—Kikoya grasses (*Pennisetum clandestinum*) and Giant Star grass (*Cynodon dactylon*) (which was specially obtained from Kenya and Pretoria) and indigenous varieties have been sown on the bunds. Some contour-ploughing has been done. In the six years 1938-39 to 1943-44, Government spent Rs. 43,380 on anti-erosion works. They have provided Rs. 20,000 for the next year (1945-46). What they can do is a mere drop in the bucket, but is better than nothing."

2. Darbar Records, Pudukkottai.

grown. A twelfth century epigraph at Neivasal lists paddy, sugarcane, varagu, gingelly and thinai¹ as the prevalent crops. Inscriptions dating the thirteenth century at places such as Melur, Oliyamangalam and Tirumayam add to the list more sophisticated crops like turmeric, betelvine and gingelly. Inscriptions at Adanur Nedungudi and Kadavampatti of the fourteenth and fifteenth centuries, speak of pulses, mango², banana, coconut and ginger. This crop pattern continues to be reflected in the epigraphic, palmleaf and printed records of subsequent centuries.

The principal wet crop of the Pudukkottai region has traditionally been paddy. Varagu and pulses have formed the principal dry crops. Groundnut, which arrived in India in the mid-nineteenth century, has also thrived on the Pudukkottai soil. Ragi, cholam and oumbu have similarly joined the dry crops of the area. 'Garden' crops have included maize,³ tobacco, chillies, vegetables and fruit crops such as plaintain, mango and jack. Thinai is now grown in very small areas.

The summer cultivation or 'kodai vellamai' has down the years commenced in the month of Masi (February-March), ending Adi (July-August). The 'kala vellamai', which is more extensive, has normally begun in Adi and extended over four to six months. Rains being irregular, this cycle has, of course, frequently called for adjustments. Wet lands have had at times to be used for dry crops and paddy has been raised with well water alone. Or again, two short-term varieties of paddy have been grown instead of one long-term variety, or 'kalam' cultivation has

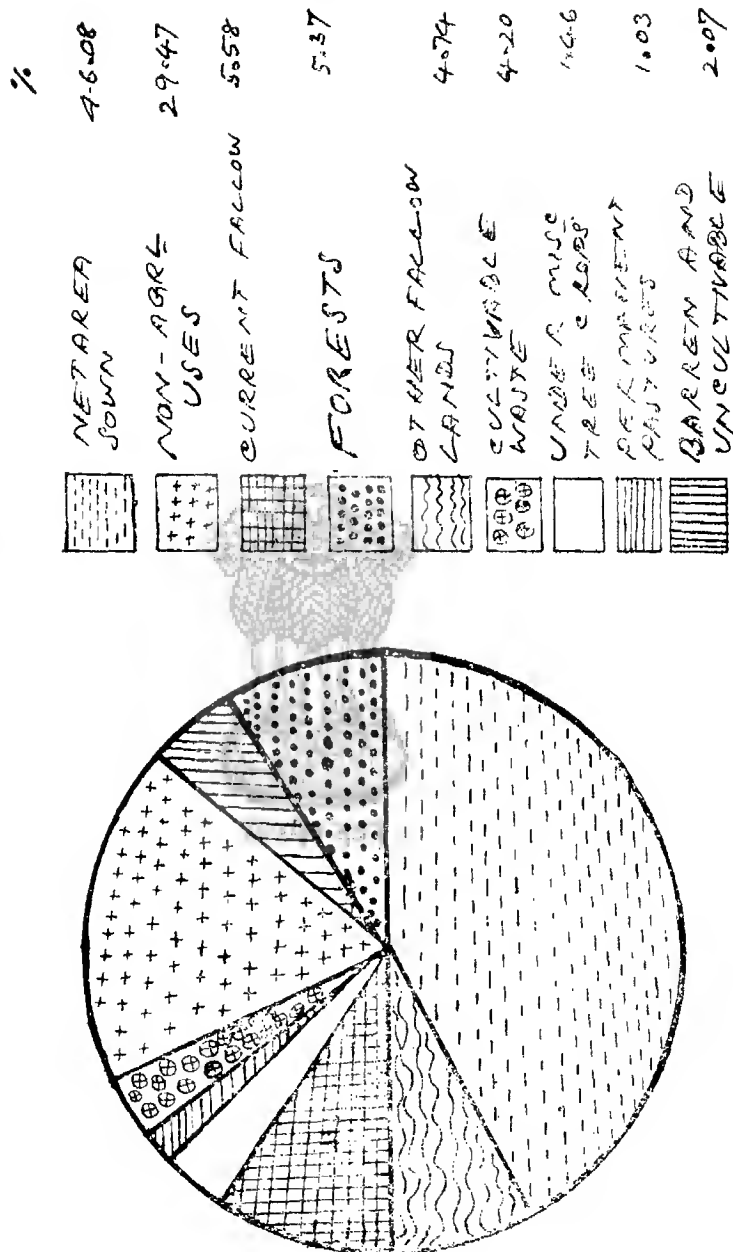
1. *Setaria italica* : The Thinai grain is very small. It can yield 700 to 800 lbs under dry conditions and upto 2,000 lbs. under irrigation.

2. Mangoes have thrived in Pudukkottai for centuries, although no outstanding type is associated with the place. In a letter to the East India Company headquarters at Madras, dated the 16th of September 1760, the Tondaiman gives the information that the king of Travancore's agent sent him a present of 'Palnceer leaves to make Cajan Books.' to reciprocate which the Tondaiman sent him "some mangoes which are scarce in that country", (Tamil Nadu Archives). Hemingway writes of Tiruchirappalli in his 1907 Gazetteer of that district : "The mangoes of the district are not particularly good except in Pudukkottai, where good graft trees, and also tolerable country varieties are to be found."

3. Maize can also be grown as a summer crop on wet lands.

LAND-USE PATTERN OF PUDUKKOTTAI DISTRICT - 1973-74

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begun late and extended in to 'kodai'. When the rains fail altogether¹ the kodai operations are abandoned. Sometimes the ryot has attempted to raise a long wet crop after the first rains, hoping that the crucial tank will get its supply by subsequent rains. But when the hoped for rain has kept off, his crop has withered. The experience of a difficult agriculture has given rise to a set of sad and wise maxims² based on hard experience, which have been transmitted down the generations. One of these refers to deep ploughing³. அகல உழுகிறதை ஆழ உழு, Another says that there is nothing like the riches that the plough yields: மேழிச் செல்வம் கோழை படாது. Yet another tells the farmer of the need for vigilance at the fields: பயிர் பாராமல் கெட்டது கடன் கேளாமல் கெட்டது

The implements handed from father to son in the area have included the common plough (requiring numerous ploughings to move the soil throughly), the hoe (for weeding), the crowbar and spade (for digging-up and soil), the 'aruval' or bill-hook (for reaping and pruning hedges), and the 'parambu' or levelling plank (for smoothing wetlands).

The Diwan Peishkar of Pudukkottai who has been quoted earlier, 'wrote⁴ in 1938 to the Diwan on the subject, of implements "When I once yoked an English plough just to show its advantages to the ryots, many that were present saw it and came to know that

1. *A Manual of the Pudukkottai State* (1938) informs us: "When pests ravage the crops, or the rains fail, the lower-caste peasantry take themselves to the 'Pusari' through whom sacrifices of sheep, etc. are offered at the altars of the godlings of the rural pantheon. Another curious way of invoking rain is for the village elders or priests to beg boiled rice and sauce from every house in the rainless villages. When a sufficiently large quantity of rice and sauce have been collected the inhabitants go out in a body to the nearest water course or channel where the two are mixed, and male and female figures are formed with them on the dry sand. The peoples gather round the figures, beat their breasts, and set up a cry of lamentation loud enough, it is hoped to be heard in Heaven".

2. *A Manual of Pudukkottai State* Volume I (1938).

3. Deep ploughing has, however come to be given a second look by the Department of Agriculture. It has been found contra-indicated wherever the soil is shallow. Mere scratching of the surface in such soils will produce sufficient tilth for the seeds to sprout, the weeds to be destroyed and moisture to be conserved. (See *Farmers of India*; Volume II, page 99).

4. Darbar Records, Pudukkottai.

it was simply a plough. Their words were as follows: 'This will not do for us, it requires a pair of bulls worth not less than Rs. 100. If the plough gets deranged it would be taken to Pudukkottai and there would be an expense of cart-hire, etc. If an old-fashioned plough be damaged we can easily get it repaired by a village carpenter and to use it a pair of bulls worth but Rs. 20 would do. A single man could plough with it. There is no reason for buying iron ploughs instead of these'. This shows the tendency of the ryots. They hold similar opinions about water-lifts also. In Viralimalai firka and other places kapilathes are fixed at a small cost and water is raised by a single man with a pair of common bullocks'. The farmer's conservatism about experimenting with new implements notwithstanding. Iron mould board ploughs, which can go deep and also conserve soil moisture have, however, come to be used in padugais or areas with good soil depth. "Roll-easy", mhote-wheels and pumping plants for irrigation entered picture in places such as Annavasal, Paliyur, Sengampatti and Adanur as part of extension programmes under-taken by the erstwhile State. But mechanization has yet a long way to go in the district's agriculture.

The Pudukkottai farmer has followed the customs of his forefathers in the matter of the manures used also. The dropping of cattle, ashes, decayed vegetable matter, house, thatches, palmyra-fronds, leafy twigs, shrubs which contain milky juices, are among the substances ploughed into the ground. 'Virali' (*Dodonaea viscosa*) leaves as also those of 'Avarai' (*Cassia siamea*), 'Pungai' (*Pongamia glabra*) 'Kolinji' (*Tephrosia purpurea*) 'Poovarasu' (*Thespesia populnea*), redgram and the cadjan pea are some of the types of organic manure used. Ignorant of the advantages of raising rotatory crops, the Pudukkottai farmer has grown, until recently, the same kind of crop year after year, without adequate manuring. His soil, consequently, has been an exhausted soil often obliging him to let it lie fallow—an old and insufficient means of restoring the soil's properties.

Plough cattle have not received in Pudukkottai the attention they deserve. Ryots, needing every inch of cultivable land for their crops have hesitated to set apart any portion of the farm

exclusively for fodder. This had led to an inadequate pasture and a weak livestock. And Pudukkottai, like the rest of the country, has caked and burnt dung—continuously and wastefully.

And yet while many of these old practices persist, the scene is changing.

The Contemporary Scene.

The Department of Agriculture and personnel of the Coimbatore Agriculture University, conducted a detailed survey of the district's contemporary agricultural scene under the guidance of A. Venkataraman, Director of Agriculture, Madras. The paragraphs that follow are based on their findings.

Landlord and Tenant.—87.86 per cent of the district's total population is rural. This is higher than the Tamil Nadu average of 69.74 per cent. Of the total, 3,23,649 have been classified as 'workers'. Cultivators and agricultural labourers account for 77.82 per cent of this figure, the share of the cultivating class being 57.91 per cent.

In general every third member of the population belongs to the workers class, while every fifth belongs to the cultivator category. In terms of percentage, the workers are more or less evenly distributed among all the taluks, while relatively high concentrations of cultivators are met with in Alangudi and Kulattur taluks. Arantangi taluk has the highest concentration of agricultural labour. The following table gives the occupational distribution of the district's agricultural population.

(Census of India, 1971).					
Name of the taluks.	Total population.	Cultivators.		Agricultural.	
		Number.	Per cent to total workers.	Number.	Per cent to total workers.
(1)	(2)	(3)	(4)	(5)	(6)
Arantangi ..	208,961	39,283	55.64	16,733	23.70
Alangudi ..	161,441	38,572	70.3	8,243	14.92
Kulathur ..	214,904	49,305	61.79	16,437	20.60
Tirumayam ..	197,443	36,414	56.19	13,556	20.92
Pudukkottai ..	164,602	23,823	44.49	9,522	17.28
District total ..	947,351	187,427	57.91	64,441	19.91

1. Landowning and tenant cultivators.

(Census of India, 1971).

Name of the Taluks.	Other workers.		Total workers.	
	Number.	Percent to total workers.	Number.	Percent to total population.
	(7)	(8)	(9)	(10)
Marargi ..	14,586	20.66	70,602	33.79
Maragudi ..	8,116	14.78	54,911	34.01
Marathur ..	14,053	17.61	79,795	37.13
Marudanayam ..	14,828	22.89	64,798	32.82
Pudukkottai ..	20,198	33.04	53,543	32.53
District total ..	71,781	22.18	323,649	34.16

Their Labourer.—Since the district's agricultural lands are over-whelmingly dependant on the monsoons, its farm population is occupied seasonally—for the most part, only in one season. Casual, semi-permanent and contract labour for performing term-operations are, consequently, in vogue in the district.

The *modus operandi* of contract labour differs from ordinary labour in their job performance. The members are mostly able bodied men and women well-versed in various activities. They commence work in the early hours and continue the work all through the day in an attempt to earn the maximum wage. Harvesting is their choice occupation since it provides employment both for men and women labour. By systematically coordinating their activities through mutual arrangements they maximise their earnings by sometimes nearly $1\frac{1}{2}$ to 2 times the casual labour wage. During peak harvest seasons, the share of men labourers under the contract system may be as high as 10–12 kilogrammes of paddy per person. On an average it is 8–9 kilogrammes.

The average cash wages for casual labour is Rs. 3.00 a day for men and Rs. 1.50 to 2.00 for women, both being supplied with the midday meal. Payment is always in kind for harvesting operations, which on an average is $6\frac{1}{2}$ kilogrammes ($2\frac{1}{2}$ marakkal) for men and 5 kilogrammes (2 marakkal) for women.

'Permanent' labourers are employed under an oral contract for one year and the term is extended subsequently depending upon the relationship between the farm owner or tenant and the labourer. They attend to all routine day-to-day farm operations and also work at the farmers' home. For the work days they are paid 2½ kilogrammes (one marakkal) a day plus one meal. Beside daily wages, they are paid 5 bags of paddy (57 kilogrammes each) annually for the services rendered. During harvest time they receive the same wages as casual labour and also become eligible for a portion of paddy out of the second threshings and grain sweepings known as *Kalavadi* and *Chinthamani*. The perquisites include a *dharti* and towel given during the *Dipavali* and *Pongal* festivals.

The 'bonded labour' system has been found to prevail in parts of Arantangi and Alangudi taluks. Certain big landlords, having advanced to these poor people, amounts ranging from Rs. 200 to Rs. 1,000 on execution of promissory notes, have 'employed' them as farm servants. Entire families of such labourers work on the farms of the landlords. They are mostly paid in kind for their labour. The promissory notes are used as an instrument of coercion that prevents the bonded labourers from moving to other occupations.

As on 24th September 1976, 169 persons consisting of 48 Agricultural Labourers, 79 Synthetic Gem Cutters and 42 Quarry Workers were identified as Bonded Labourers and released from their bondage in Pudukkottai district.

House sites have been assigned to 31 freed bonded labourers. Cultivable lands of an extent of 52.45 acres have been assigned to 44 persons out of 48 freed bonded Agricultural labourers. The Co-operative Central Bank Pudukkottai has issued loans to the tune of Rs. 38,600 to 41 freed bonded labourers for whom lands have been assigned to purchase work bulls and to 2 persons crop loans of Rs. 600. Steps have been taken to assign lands to the remaining freed bonded Agricultural labourers.

Out of 169 freed bonded labourers 73 persons have been granted loans to the tune of Rs. 71,500 upto Rs. 1,000 each by the Indian Overseas Bank, Pudukkottai to do their business, independently.

As regards the freed Quarry workers steps have been taken to form a Co-operative Society of these workers at Pudukkottai. The Revenue Divisional Officer, Pudukkottai is making arrangements to provide one quarry for their employment.

In view of poor employment levels, agricultural labourers move from the district's border taluks of Arantangi, Alangudi and Pudukkottai to the Thanjavur district. This is during paddy planting seasons but somewhat more heavily during harvesting seasons (December, January to February, March). In this period, the demand for labour is considerable. Local labour in Thanjavur being inadequate, Pudukkottai's labour supplies the need in part.¹ For organising labour mobility there exists an informal system in Pudukkottai, which helps in bringing together groups of fifty people or more at a time who are inclined to move out.

The Diurnal Round.—Operations on the farm have traditionally been slow in pace except, of course, in Arantangi taluk where the presence of better irrigation facilities makes intensive cropping and a high crop intensity possible.

The Pudukkottai paddy grower's diurnal round follows this broad pattern.

The time of commencing farm operations and their duration vary with the nature and type of work. Preparatory activities like puddling, ploughing, levelling, etc., are commenced in the early hours of the day (at about six in the morning) and come to

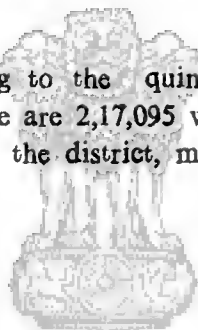
¹ Enquiries reveal that labour mobility from these taluks to the Thanjavur district is mostly confined to the Thiruvaiyaru, Papanasam, Orathanadu, Pattukottai, Mannargudi and Peravurani areas.

For planting operations, mobile labour receives only cash payment plus one midday-meal packet (*pattai soru*) mostly consisting of cooked rice and ground dhal (*shuvaiyal*). Wage payments normally range from Rs. 2.00 to Rs. 2.50 for women and from Rs. 3.00 to Rs. 3.50 for men. Payment is entirely in kind for harvesting operations at the rate of 6½ kilogrammes (2½ marakkals) for men and 5 kilogrammes (2 marakkal) for women. In addition both men and women are given one midday meal consisting of rice gruel or cooked rice. For overtime work, they are paid twenty-five paise extra, which is rather unusual. In cases where threshing, cleaning and stacking of straw are done by mobile labour, the men are paid at the rate of 10 kilogrammes per day (4 marakkals) since the job is arduous.

an end by about two in the afternoon. The average duration is about seven to seven-and-a-half hours. Similarly transplanting operations are started in the early hours and continued till mid-afternoon. Intercultivation operations, fertilizing, weeding, etc., are done in two work sessions commencing late in the forenoon and continuing up to dusk. Harvesting is also done during both the sessions but the duration of the work normally extends up to nine hours a day since the scheduled operations like harvesting, threshing, cleaning, winnowing and bagging are to be completed in the same day.

The normal hours of work during the planting season ranges from 8 to 9 hours and, in the case of harvesting, going up at times to 10 hours. This is because the scheduled operations of harvesting, threshing and cleaning are sought to be completed on the same day.

Livestock.—According to the quinquennial livestock census conducted in 1974, there are 2,17,095 work bullocks and 12,966 female work animals in the district, making a total strength of 2,30,062.



सत्यमेव जयते

Serial number and item.

1966 Census. 1974 Census.
Increase (+)
or decrease
(-) over 1966
figures.
Percentage
increase (+)
or decrease
(-) over
1966 figures.

(1)	(2)	(3)	(4)	(5)
1 Cattle—				
(a) Males over 3 years—				
(i) Used for breedings	1,213	1,962 (+)	379 (+)	61.7
(ii) Used for breeding and work	17,715	21,072 (+)	3,357 (+)	19.0
(iii) Used for work	1,41,293	1,93,024 (+)	54,731 (+)	38.7
(iv) Others (Stray and scrub cattle kept for manure purpose)	4,827	9,827 (+)	5,000 (+)	103.6
Total	1,65,048	2,28,285 (+)	63,837 (+)	38.7
(b) Females over 3 years—				
(i) Breeding :				
(a) In milk	34,600	57,557 (+)	22,957 (+)	66.3
(b) Dry	46,053	54,275 (+)	8,222 (+)	17.9
(c) Not calved even once	13,781	16,388 (+)	2,607 (+)	18.9
(ii) Working	11,342	12,966 (+)	1,624 (+)	14.3
(iii) Others (stray and scrub cattle kept for manure purpose)	3,430	1,15,798 (+)	2,368 (+)	69.0
Total	1,09,206	1,46,984 (+)	37,778 (+)	34.6

(c) Young stock	..	..	..	..	..	63,820	₹98,292 (+)	34,472 (+)	54.0
Total Cattle	..	..	..	..	..	3,38,074	4,74,161 (+)	1,36,087 (+)	40.3

2. Buffaloes—

(a) Males over 3 years—

(i) Used for breeding	..	..	..	..	..	611	1,466 (+)	855 (+)	139.9
(ii) Used for breeding and work	..	..	..	..	..	4,957	5,637 (+)	680 (+)	13.7
(iii) Used for work; ..	..	..	..	..	..	10,889	15,743 (+)	4,854 (+)	44.6
(iv) Others (stray and scrub buffaloes kept for manure purposes).	..	..	..	..	..	1,269	2,607 (+)	1,338 (+)	105.4
Total	..	..	..	..	..	17,726	25,453 (+)	7,727 (+)	43.6

(b) Females over 3 years—

(i) Breeding—

(a) In milk	..	..	..	..	..	16,348	29,665 (+)	13,317 (+)	81.5
(b) Dry	..	..	..	..	..	13,715	18,687 (+)	4,972 (+)	36.3
(c) Not calved even once	..	..	..	..	..	3,953	5,805 (+)	1,852 (+)	46.9
(ii) Working	..	..	..	..	..	2,477	4,465 (+)	1,988 (+)	80.3
(iii) Others (stray and scrub Buffaloes kept for manure purpose)	..	..	..	..	..	919	1,717 (+)	1,798 (+)	195.6
Total	..	..	..	..	..	37,412	61,339 (+)	23,927 (+)	64.0

On an average there is one work animal per hectare of gross cultivated area. Cattle provide the traction for performing a variety of farm activities, but are mostly used for dragging a plough. Not to be forgotten also is their useful role in what has been called¹ "converting the poor grazing of the thrifless scrub into that most useful and used commodity, dung". The majority of these are the male off-spring of the village cows. The young bulls are generally castrated on the day after the Pongal festival, when they are three to four years old—the fate of all farm bulls. The painful process of 'mulling' is mercifully being replaced by the comparatively painless method facilitated by the Burdizzo instrument.

Pudukkottai's average draught bullocks cannot claim the pride of ancestry associated with the Kangayams and Alambadis of Coimbatore, although some farmers go in for these finebreds from drovers as they bring these superior cattle to Pudukkottai after the fairs at Uppidamangalam and Manapparai—one of the well-known routes of Kangayam cattle drovers. The Thanjavur Mottai or Umbalacheri with its small build, cauterized horns and clipped ears, is to be seen working on puddled farms in east Pudukkottai. The 'country' buffalo—slower than the bullock but more powerful—is also used for ploughing and heavy draught.

The other major use to which the district's livestock is put is the lifting of water from wells. If the lift is high the picotah 'yetham' or the 'kapila' lift (consisting of a large hemispherical leather or iron bucket with a long leather tail open at the end) is used. One rope holds the bucket and another the tail. The farmer passes over a wheel that works between two poles fixed at an angle and the latter runs over a roller on a level with the channel. When the bucket gets filled it is hoisted by a pair of yoked bullocks that walk down a slope, pulling the two ropes fastened to their cross-piece.

Pudukkottai's livestock is in need of improvement. In a 990·57 acre District Livestock Farm at Machuvadi, Pudukkottai, an attempt is being made by the Department of Animal Husbandry²

1. *Jungle and backyard* by M. Krishnan, National Book Trust (1961).

2. This Department also maintains at Pudukkottai one sheep unit in which Kilakaraisal and Mandya breeds are sold, and one piggery unit which supplies breeding stocks, Yorkshire being most favoured. The Department runs, besides, one Veterinary Hospital-cum-Key Village Centre, one Clinical Veterinary Laboratory, three Veterinary Dispensaries-cum-Key Village Centres, nine Veterinary Dispensaries and as many as forty-five Animal Husbandry sub-Centres in the district.

to upgrade the nondescript local bovines. Selective breeding of these with 'pure exotic males' from the Kangayam, Sindhi, Jersey Cross Sindhi and Murrah varieties is undertaken on the Farm. Its fodder area of 710 acres produced, in 1973-74, 41,24,530 kilogrammes of stall-feed. Of this extent, 135.5 acres are under pasture.

Land use. —How has the Pudukkottai agriculturist used the land available ?

The land-use pattern during 1973-74 is as follows :

<i>Classification.</i>	<i>Area in hectares.</i>	<i>Percentage to total area.</i>	<i>State average in percentage (1971-72).</i>
(1)	(2)	(3)	(4)
A. By professional survey	466,328.69		
B. By village papers	466,328.69	100.00	100.00
1 Forests	25,046.55	5.37	15.43
2 Barren and uncultivable land	9,651.42	2.07	6.20
3 Land put to non-agricultural use	137,431.97	29.47	11.60
4 Cultivable waste	19,576.91	4.20	3.68
5 Permanent pastures and other grazing lands.	4,803.64	1.03	1.76
6 Land under miscellaneous tree crops and groves not included in the net area sown.	6,803.64	1.46	1.77
7 Current fallows	26,034.01	5.58	6.61
8 Other fallow lands	22,097.16	4.74	4.15
9 Net area sown	214,883.39	46.08	48.80
C. Area sown more than once	14,799.59	3.17	9.94
D. Total cropped area	229,682.98	49.25	51.74

Source—

1. Small Farmers Development Agency, Pudukkottai—Draft Project Reports December 1974.

2. Tamil Nadu—An Economic Appraisal—1974 : (Part II—Statistical Tables, Government of Tamil Nadu.

FIGURE 14 (A)

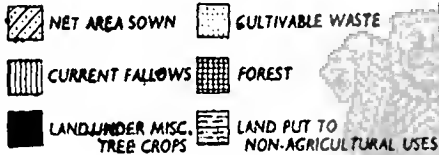
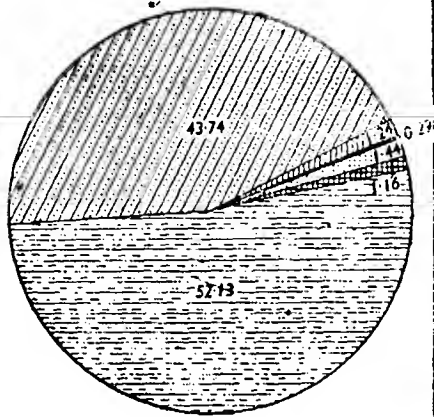
LAND USE PATTERN OF ARANTANGI TALUK
IN 1973-74

FIGURE 14 (C)

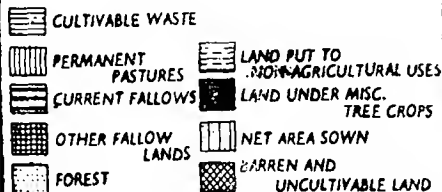
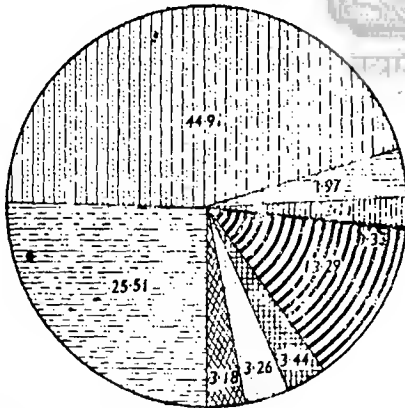
LAND USE PATTERN OF KULATTUR TALUK
IN 1973-74

FIGURE 14 (B)

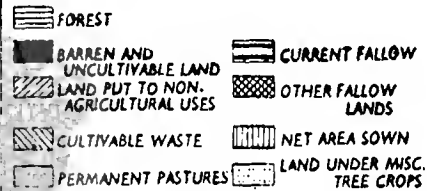
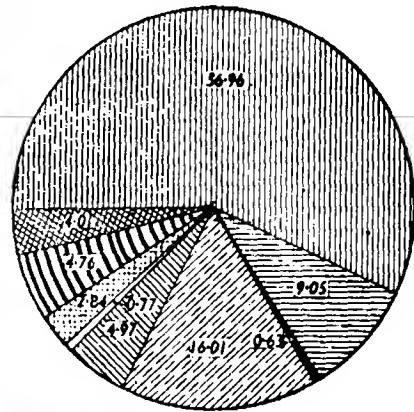
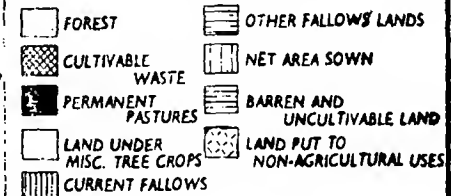
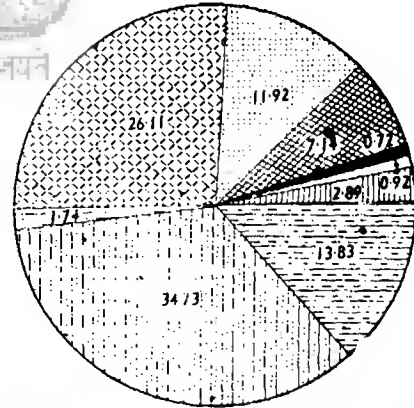
LAND USE PATTERN OF ALANGUDI TALUK
IN 1973-74

FIGURE 14 (D)

LAND USE PATTERN OF TIRUMAYAM TALUK
IN 1973-74

F.I.O .15

FIGURE 14 (F)

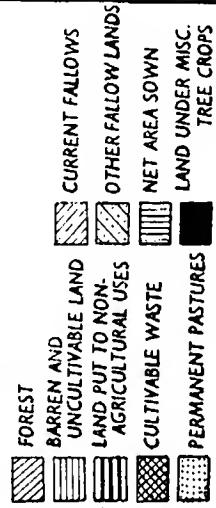
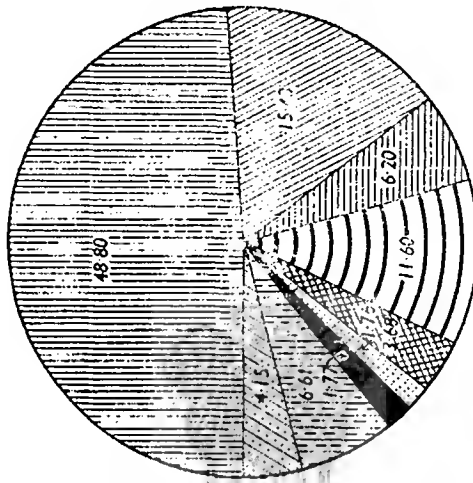
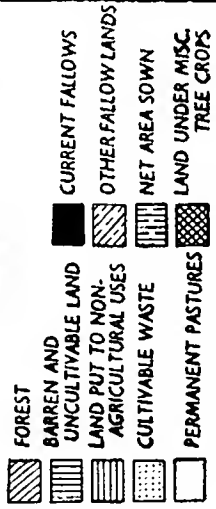
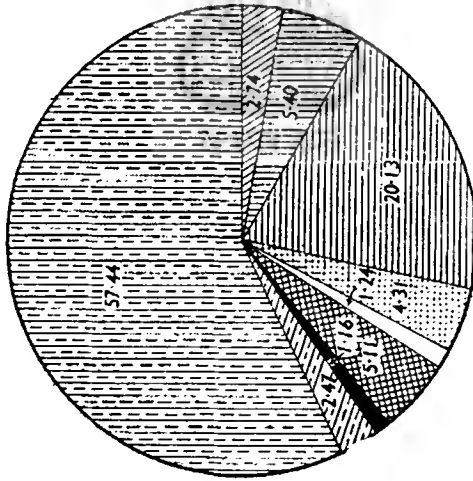
LAND USE PATTERN OF TAMIL NADU
IN 1971-72

FIG. 16

FIGURE 14 (E)

LAND USE PATTERN OF PUDUKKOTTAI TALUK
IN 1973-74

The area under forests is small, covering a little over five per cent of the total area. In terms of percentage of coverage, it is fourth among districts in Tamil Nadu.

The taluk-wise land-use classification is as follows :—

Serial number and name of the taluk.	Total geographical area by professional survey (hectares).	Forest.	
		Area in hectares.	Percentage to total area.
(1)	(2)	(3)	(4)
1 Arantangi	105,312.96	1,220.65	1.16
2 Alangudi	71,683.32	6,489.47	9.05
3 Kulathur	132,766.80	4,334.41	3.26
4 Tirumayam	94,936.83	11,314.17	11.92
5 Pudukkottai	61,628.73	1,687.85	2.74
District	466,328.69	25,046.55	5.37

Serial number and name of the taluk.	Barren and uncultivable land.		Land put to non-agricultural uses.	
	Area in hectares.	Percentage to total area.	Area in hectares.	Percentage to total area.
(1)	(2)	(3)	(4)	(5)
1 Arantangi .. .. .	..	..	54,900.00	52.13
2 Alangudi	433.85	0.63	11,473.68	16.01
3 Kulathur	4,220.24	3.18	33,862.35	25.51
4 Tirumayam	1,651.82	1.74	24,789.47	26.11
5 Pudukkottai	3,325.51	5.40	12,406.07	20.13
District	9,651.42	2.07	137,413.97	29.47

N.B.—Percentage to the total area under each classification refers to the total area in the taluk.

Source : Small Farmers Development Agency, Pudukkottai—Draft Project Report, December, 1974.

It would be seen that the area under forests is 11.92 per cent in Tirumayam and just over one percent in Arantangi. In general the area under forests is far below the suggested minimum coverage of 33 percent for maintaining the ecological equilibrium in land-use planning.

The areas under barren and uncultivable land, uncultivable waste, permanent pastures and grazing lands, and land under miscellaneous tree crops and groves are also much less, accounting for 8.6 percent of the total area as against the State average of 13.41 percent. Here again there are wide inter-taluk differences. Lands put to non-agricultural uses in Arantangi taluk, and cultivable waste in Tirumayam taluk are fairly high. The area under permanent pastures and grazing lands and miscellaneous tree crops accounts for less than 2.50 per cent.

The net area available for cultivation is 56.40 percent of the total geographical area, of which the net area sown is 46.06 per cent while current fallows and other fallows account for 5.58 and 4.74 percent, respectively. Adding to this the cultivable waste which offers potential for cropping, the net area available for farming is nearly 60 percent of the total area of the district. The recently formed State Farm Corporation of the Government of Tamil Nadu proposes to take over 10,000 acres of fallow Government land in the district and bring them under the plough.

The net area sown exceeds 55 per cent of the total area in Pudukkottai and Alangudi taluks, and about 45 per cent in Arantangi and Kulattur taluks, and 35 percent in Tirumayam taluk. The area sown more than once is only 3.17 per cent of the total and this compares very poorly with the State average of 9.94 per cent. Though the area sown more than once is relatively high in Arantangi and Alangudi taluks, this is low by any standard. The need is clear for exploratory measures to identify the economic and non-economic constraints to expand coverage under multiple cropping.

The gross cropped area exceeds 60 per cent in Alangudi and Pudukkottai taluks, while it borders 50 per cent in Arantangi and just about 35 per cent in Tirumayam taluk. In the district as a whole, the gross cropped area is less than 50 per cent while the State average is over 58 per cent.

In general the current land-use pattern indicates the taking of steps for (i) an increased afforestation programme, (ii) reclamation of 'cultivable waste' and other fallow lands and (iii) stepping-up of the area sown more than once by appropriate land-use strategies which would help to strengthen the asset base.

Water wealth.—Rivers, streams and tanks form the 'surface water' of the land, while subterranean water is regarded as 'ground water'.

It is somewhat ironical to refer to the Pudukkottai district's water 'wealth', since the district is particularly deficient in irrigational resources. And yet, its tanks and rivers (no bigger than 'jungle' streams) constitute a valuable resource for its agriculture, an instrument of livelihood, if not wealth, for its farmers. The district's rivers and tanks constitute what is technically termed 'surface water', its subterranean resources forming the 'ground water'.

Surface water.—The district's ayacut fields are irrigated entirely by rain water received in the catchments of its 'jungle' streams of rivers and communicated by these, grid-like to the district's tanks. The tanks are invariably on ground that is lower the uncultivated 'jungle' land. Of these streams or rivers, the Vellaru is the most important, serving several tanks on its way. A number of mud and masonry anicuts, the one at Kudimiamalai deserving special mention, divert the waters of Vellaru to the connected tanks. Among these, the Kavinadu tank is the biggest. Other rivers are the Pambaru, which feeds the Irumbanadu tank, among others; the Agniaru, the Kolavanaru, the Narasinga Cauvery. A few other insignificant streams play the similar role of an open conduit among the tanks of the district, which are its basic source of irrigation¹.

The process works like this : The tanks function in a series. Most of them are linked to each other in such a manner that every tank "is fed by the overflow of the one immediately above it, and feeds in turn the one immediately below it"². The tanks also, of course, take the advantage of local slope and depressions that form their individual catchment areas, for receiving water. But the mainstay of their storage is the *in seriatum* arrival of rainflows.

¹ For a history of the rivers, please see Chapter I.

² The *Manual of the Pudukkottai State* (1938) ; P. 173.

Canal water.—The northern and eastern halves of Arantangi taluk are benefited by irrigation from the Cauvery-Mettur Project canal which branches off from the Grand Anicut, providing irrigation for over 10,900 hectares. A branch from the CMP canal irrigates 1,660 hectares in the Karambakkudi block of Alangudi taluk.

The proposal, first mooted by Raja Raghunatha Tondaiman in 1837, for the bringing of Cauvery waters to Pudukkottai, was revived more than once subsequently. A scheme was reportedly put forward for tapping the Cauvery at Kodumudi and taking it through Kulattur to Pudukkottai at a cost of Rs. 1 crore. The State's finances did not admit of such an expenditure and the Government of Madras could not be interested in it. In 1906-07 seven different projects involving, apart from the Cauvery, projects and rivers such as the Periyar, Bhavani and Amaravathi, were considered and dropped. Most seriously considered was a project to construct a channel 130 miles in length and at a cost of Rs. 2.78 crores from the reservoir at Neringipet, which was to run "Parallel to, but begin higher up than the Kalingarayan channel in the Coimbatore district, and cross the Noyel and the Amaravathi by means of dams". It was believed in 1910 that this scheme if carried out, would command an extensive area in Alangudi taluk.

A proposal involving the Mettur Canal was also considered, which envisaged the canal passing through the Karambakkudi firkas of Pudukkottai, bringing about 8,000 acres under wet cultivation. But the scheme reportedly¹ fell on account of the Madras Government's declining to accord to the ryot benefited by the scheme in Pudukkottai "the same terms as the British ryots".

In the year 1934, when the project had almost reached the stage of completion, Sir Alexander Tottenham who had just taken over as Administrator of Pudukkottai, enquired² of the Government of Madras whether it would permit the Darbar to tap the Cauvery waters anywhere and if so, (i) where and (ii) what the approximate amount of spareable water would be. He was aware of the earlier failure of this proposal. But, he wrote, ³ "We are entirely dependent

¹ The *Manual* of the Pudukkottai State (1938) ; p. 187.

² Letter to C.A. Souter, Revenue Member, Government of Madras, on 11th May 1935 (Darbar Records, Pudukkottai).

³ Darbar Records, Pudukkottai.

on precarious rainfall and to get an assured water-supply for even a small area of wet lands would be a great boon". Tottenham was writing this, impelled by the 1934-35 famine. He wrote saying he was aware that this was "rather a forlorn hope".

The following reply from the Government of Madras confirmed Tottenham's fears : "I am directed to say that there are only two ways of supplying Cauvery water to the State, either by extending the Kattalai High Level channel or through the Olavayal and Alivalam channels of the Grand Anicut canal. The Kattalai High Level channel is designed to carry supply just sufficient for its ayacut, and if extra water is to be allowed through the channel for the benefit of the Pudukkottai State, it would not only have to be extended by about 25 miles to reach the State boundary, but would also have to be widened throughout its length of 25 miles. The scheme is thus prohibitively costly. As regards the supply through the Grand Anicut Canal the Government regret that as the entire area of 301,000 acres allowed by the Agreement with the Mysore Durbar has already been delimited in British territory, it is not possible to include any area in the State."

After the merger of the Pudukkottai State with the Indian Union the barriers between the waters of the Cauvery and the farmlands of Pudukkottai, ceased to be inviolable. The natural compulsions of the issue led to a revived exploration of the possibilities of bringing Cauvery waters into Pudukkottai. As a result, the Olavayal channel came to be extended so as to irrigate an extent of 2,300 acres in the Alangudi taluk. This scheme was sanctioned in 1950. More has been not found to be feasible afterwards, for the maintenance of this inter-State river's existing ayacut itself has become problematical.

Tanks.—Pudukkottai's ayacut fields are irrigated entirely by tanks. The tanks, in turn, rely wholly upon rains for water. Rain water enters the tanks either through intermittent jungle streams (the tanks being invariably on lower grounds than the uncultivated junglelands) or by intercepting "surface water from their catchment

area¹". The extent irrigable by these major and minor tanks² and described in revenue records as 'wet', amounts today to 2,20,226 acres. The area 'cultivated' outside the ayacut of these tanks without any organised irrigation and classified as 'dry' amounts to 4,24,089 acres.

Rains during the first monsoon set the pace for sowing 'dry' crops and raising paddy nurseries in the tankfed areas. The first flushes of rain water then start flowing from catchment areas into the tanks and surplusing from the upland tanks to the tanks down below. It is during this period that the demand for labour, capital and inputs reaches its peak.

The concentration of rainfall in a few months in any year, its variation in amount, intensity and distribution both over the years and within a year have necessitated the designing of measures to capture and utilise rainwater through ponds and tanks.

The capacity of the tanks differs widely in terms of command areas and the duration for irrigation. Some of the tanks situated at the foot of the hills and endowed with springs, when supplemented by rains, ensure adequate water supply for raising two crops and more. In the rest of the area, the water stored is found just sufficient to support a single crop of paddy. This is the most common situation.

In the erstwhile Pudukkottai State, the irrigation sources were grouped under five classes³ according to the number of months they afforded irrigation to the ayacuts under them.

1. Chapter V of *A Manual of the Pudukkottai State*, Vol. I, 1938.

2. Most of them are capable of irrigating less than 200 acres each and were classified by the Pudukkottai Irrigation Regulation No. III of 1933 as 'minor'. This Regulation enumerated 139 tanks "each capable of irrigating 200 acres or over," as 'major.'

3. First Class : All irrigation sources whether anicuts or river channels or tanks fed by them or by rain affording a supply of water for not less than eight months in the years.

Second Class : All irrigation Sources whether anicut or river channels or tanks fed by river or rain affording a supply of less than eight months but not less than five months in the year.

Third Class : All irrigation sources affording a supply of less than five months but not less than three months.

Fourth Class : All irrigation sources affording a supply of less than three months but not less than one month in the year.

Fifth Class : All irrigation sources affording a supply of less than one month.
The Achukattu lands depending on rains and surface moisture came under this class,

The number of tanks in each of the taluks and the ayacut under each are as follows :

<i>Taluk.</i>	<i>Number of tanks.</i>	<i>Ayacut area (in hectares)</i>	<i>Average Ayacut area per tank (in hectares.).</i>
1 Arantangi	531	22,253.04	41.91
2 Alangudi	503	10,976.52	21.82
3 Kulattur	1,852	20,614.98	11.13
4 Tirumayam	1,526	19,699.59	12.91
5 Pudukkottai	533	6,894.82	12.92
	<hr/> 4,945 <hr/>	<hr/> 80,438.95 <hr/>	<hr/> 16.25 <hr/>

Source : Office of the District Agricultural Officer, Pudukkottai.

On an average, there are 3.5 tanks per sq. mile in the district. It is observed that there is wide variability in the command area which, on an average, is 11.13 hectares per tank in Kulattur taluk and 41.91 hectares in Arantangi taluk. Relatively low rainfall in Kulattur, Tirumayam and Pudukkottai taluks accounts for the poor inflows and lesser coverage.

Considering the tanks classified as "major" the relationship between the waterspread area and the area commanded is as follows :

1. Alangudi taluk	1 : 2.17
2. Tirumayam taluk	1 : 1.41
3. Kulattur taluk	1 : 1.32
4. Pudukkottai taluk	1 : 1.38

Shallowness of the tanks and their heavy dependence on uncertain rainfall are observed to be the main reasons for this poor relationship even in the case of major tanks. Understandably this is much less in the case of other tanks. The scope for increasing the storage capacity of these tanks is only marginal since raising

the embankments of tanks beyond a certain upper limit is not considered beneficial, as this would result in inundating the arable land in the upper reaches and starving the tanks further down. Normally in a year one or two flushes help in filling up these tanks, while those tanks adjoining the rivers get a few more fillings from the anicuts constructed across the river. In years of poor rainfall tanks of the fourth and fifth class invariably fail to support even a single crop of paddy. Digging wells inside the tank-bed area help to augment water supply to a limited extent and thus save crops in their critical periods. This work has been taken up recently and 150 such wells have been dug. This indicates the potential for large scale exploitation.

Groundwater.—Groundwater is another part of the hydrologic cycle and is derived from that quantum of precipitation that infiltrates into the ground. Hydrogeologic studies help to determine the shape, arrangements and hydrologic characteristics of sub-strata.

Based on this, Pudukkottai district can be broadly divided into two segments : the western half comprising of consolidated rocks, commonly known as hard rocks, and the eastern half underlain by semi-consolidated and unconsolidated sediments. The hard rocks have negligible primary porosity and the storage and circulation of groundwater and its availability to wells are dependent on the extent to which secondary porosity has developed. The semi-consolidated and unconsolidated sediments met with in the eastern segment comprises of Cuddalore sand stones and alluvium, the latter occurring along the course of Vellaru river on the south-east. Cretaceous rocks are also found to occur. The Cuddalore formation is composed of fine to coarse sands, sand stones, gravels, which commonly contain water under confined conditions giving rise to flowing wells.

The groundwater exploration studies have indicated that the area between Tiruvonam (10 30' 00" : 79 90" 30" : 58 N/2) and Pudupatti (10 34' : 79 04' : 58 N/2) have potentials for groundwater development. In Arantangi and Avudayarkoil blocks where detailed studies have been carried out by the United Nations Development Programme, 25 deep tube wells have been recommended. Occurrence of potential aquifers are practically nil in the Vellaru alluvium in view of its small thickness and absence of extensive granular horizons.

Open wells and tube wells are means of extracting this ground water for agricultural and other purposes. The water-table is found to vary among the taluks. In Arantangi taluk in general it varies from three to four metres below the ground level during the summer months and one metre below ground level during the rainy months, with a drawdown depth of 2 to 2.5 metres. In Alangudi as well as in the three other taluks, the same phenomenon is met with. In general, it has been observed that there is only surface percolation supplemented by weak springs and these are capable of effective irrigation for about an acre or more during rainy seasons and much less during summer periods. Most of these are fitted with traditional mhots to lift water. The number of wells in each of the taluks and those energised are shown in the table below :

Serial number and taluk.	Number of irrigation wells.			Energised.		Total.
	Masonry.	Non- masonry.	Total.	Electric motor.	Oil Engine.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1 Arantangi ..	500	498	998	375	346	721
2 Alangudi ..	15,102	2,822	17,924	1,612	1,247	2,859
3 Kulattur ..	11,057	4,891	15,948	2,863	2,760	5,673
4 Tirumayam ..	5,544	529	6,073	2,034	254	2,289
5 Pudukkottai ..	846	5,535	6,381	487	84	571
Total ..	33,049	14,275	47,324	7,371	4,691	12,067

Small wells are also dug up in the coastal belt during summer to irrigate small vegetable plots.

Source : Office of the District Statistical Officer, Pudukkottai.

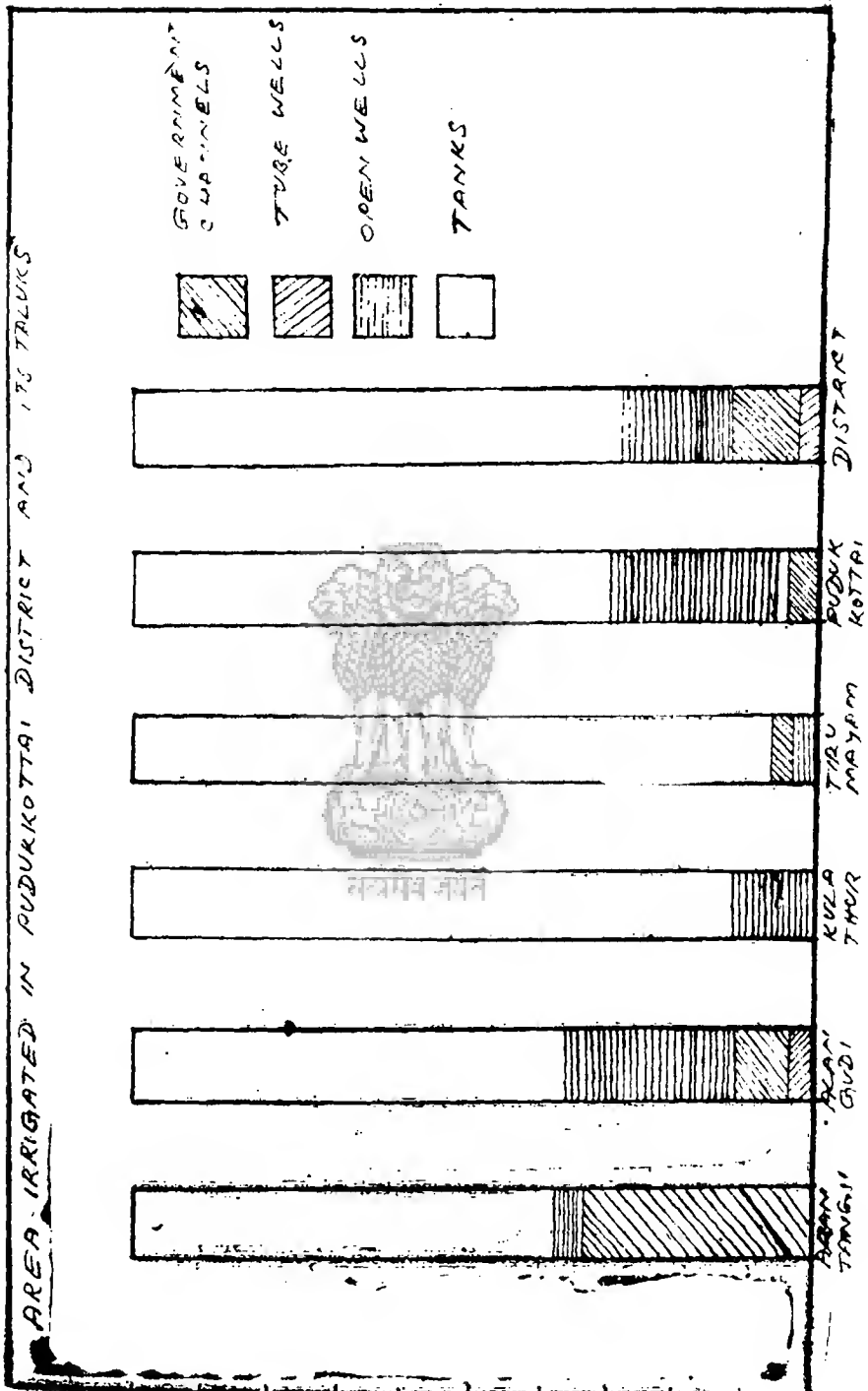
There are, however, isolated pockets and low lying areas where open wells of moderate depth of 15 metres and above are found to yield adequate output for irrigation all through the year. A few of these wells have been located in Kudimiyamalai State Farm. More 36 open wells have been dug and energised. The average size of the well is 10 metres in diameter and 12-14 metres in depth but some of the wells go up to 15 metres. The strata of the wells range from gravel to hard granite rocks. Even in areas with granite substrata, there are fissures and cracks harbouring perennial springs, which have good underground water potential.

In general open wells all over the district are shallow (within 10 metres) and some of them have sufficient underground potential to sustain intensive cropping all round the year. One of the reasons for not deepening the wells seems to be that striking perennial underground springs is uncertain. The cost of constructing a well of 8m. x 8m. x 8m. ranges from Rs. 3,000 to 4,000.

Tube wells are still an unfamiliar sight in this district. The Oil and Natural Gas Commission of the Government of India has erected some exploratory tube wells in search of fuel and these tube wells are at present available for irrigation. Seven borewells were also drilled in this District by the erstwhile Exploratory Tube Wells Organisation, the Central Groundwater Board and the State Government. Of these, only three (at Pudupatti, Tiruyonam and Keeramangalam) were converted into production wells. Although the exploratory borehole at Melpattu in Arantangi taluk was abandoned due to poor yield subsequent explorations in this taluk by various organisations have given hopes of the existence of potential squifiers. A few tube wells have also been sunk by the State Department of Agriculture. These wells are localised in Alangudi taluk and adjoining areas of Pudukkottai taluk.

The Groundwater Department at the State level has drilled thirty exploratory wells : thirteen in Arantangi taluk, six in Pudukkottai taluk, five in Alangudi taluk and three each in Kulattur and Tirumayam taluks. Out of these thirty wells, thirteen were converted as production wells and handed over to the Tamil Nadu Water Supply and Drainage Board and Government Agricultural farms.

Alangudi region and bordering areas of identical geophysical conditions are believed to possess substantial underground water resources at depth ranging over 80 metres and above. Three borewells of 8" to 10" diameter sunk in the Vamban Experimental Station area are very successful. Their output is estimated to be 8,000gph., 10,000 gph., and 201,500 gph., respectively. Two of these were sunk by the Oil and Natural Gas Commission. The static water level ranges from 22m.—28m. and the depth of these wells are about 140m.



Similarly, within a four mile radius of Pullanviduthi there are 26 tube wells located in the villages of Vanakkankadu, Vadakadu, Mangadu, Periyadi, and Rasimangalam. These are all owned by farmers and erected by the State Department of Agriculture. The dimension varies from 6"—10" and the average output is about 10,000 gph. All these have been commissioned for effective use and new crop patterns under scientific management practices are emerging in the command areas. The success in tapping underground water by erecting a series of four turbine pumps in some areas by enterprising farmers gave confidence to their neighbours in this area to venture on new wells.

The current cost-estimate of sinking a borewell to a depth of 80 metres is as follows :—

	RS.
Sinking of borewell	7,500
Casting pipes	5,000
Installing of pumping equipment and accessories.	25,000
	<hr/>
	37,500
	<hr/>

The annual maintenance cost is approximately Rs. 700.

Artesian wells are found in four locations of Arantangi taluk, though the scope over large areas seems to be limited. The particulars of output and cost are as follows :—

Serial number and name of the villages where artesian wells are located.	Year of construction.	Output in gallons per hour.	Depth in feet.	Cost, RS.
(1)	(2)	(3)	(4)	(5)
1 Panikkanvayal	1971	700	950	N.A.
2 Erukkalakottai	1972	2,000	950	40,000
3 Avanathankottai	1972	2,000	1,100	40,000
4 Arantangi	1974	3,000	1,150	54,000

Appraisal:—The sources of irrigation for the district's 'wet' lands can be broadly classified into four categories : (i) tanks fed by river channels, (ii) tanks fed by rains, (iii) anicuts or river channels, and (iv) underground water resources by open wells or deep borewells supplemented by rains and/or by canal.

The areas irrigated and the sources of irrigation talukwise are given in the following tables :—

Serial number and name of the taluk. (1)	(AREA IN HECTARES)				
	Channel	Tanks			Tube Wells
	Private. (2)	Government. (3)	Private. (4)	Total. (5)	Private. (6)
1 Arantangi ..	11,859.92 (33.75)	22,253.04 (63.33)	..	22,253.04 (63.33)	..
2 Alangudi ..	1,331.17 (8.07)	10,968.02 (66.52)	8.50 (0.05)	10,976.52 (66.57)	78.95 (0.48)
3 Kulattur ..	2.02 (neg.)	20,614.98 (94.27)	..	20,614.98 (94.27)	..
4 Tirumayam	56.68 (0.29)	19,425.50 (97.97)	274.09 (1.39)	19,699.59 (99.36)	..
5 Pudukkottai ..	325.91 (3.66)	6817.01 (76.58)	17.81 (0.20)	6834.82 (76.78)	..
District total ..	13,575.70 (13.28)	80,078.55 (78.34)	300.40 (0.29)	80,378.95 (78.63)	78.95 (0.48)

Figures in parentheses indicate percentage to irrigated area.

Source :—Small Farmers Development Agency Draft Report, Pudukkottai—Draft Project Report, 1974.

Serial number and name of the taluk.	Open wells			Net Irrigated area.	(AREA IN Area Irrigated more than once.	HECTARES) Total Irrigated area.
	Government	Private.	Total.			
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1 Arantangi ..	..	1,025.91 (2.92)	1,025.91 (2.92)	35,138.87 (100.00)	4,921.86	40,060.73 ..
2 Alangudi ..	..	4,101.21 (24.88)	4,101.21 (24.88)	16,487.85 (100.00)	3,176.11 ..	19,663.96 ..
3 Kulattur ..	63.16 (0.30)	1,188.07 (5.43)	1,252.23 (5.73)	21,869.23 (100.00)	504.45	22,373.68 ..
4 Tirumayam ..	1.21 (Neg.)	69.54 (0.35)	70.85 (0.35)	19,827.12 (100.00)	217.66	20,098.78 ..
5 Pudukkottai	1,740.89 (19.56)	.. ..	1,740.89 (19.56)	8,901.62 (100.00)	890.72	9,762.35
District total ∴	1,850.26 (1.81)	6,340.83 (6.20)	8,191.09 (8.01)	102,224.69 (100.00)	9,734.81 ..	111,959.50 ..

(Figures in parentheses indicate percentages to irrigated area.)

Source.—Small Farmers Development Agency, Pudukkottai—Draft Project Report, 1974.

<i>Serial number and name of the taluk.</i>			(AREA IN HECTARES)			
			<i>Government channels</i>		<i>Tanks.</i>	
			<i>Area.</i>	<i>Percentage to total area.</i>	<i>Area.</i>	<i>Percentage to total area.</i>
(1)			(2)	(3)	(4)	(5)
1 Arantangi			11,859.92	33.75	22,253.04	63.33
2 Alangudi			1,331.17	8.07	10,976.52	66.57
3 Kulattur			2.02	Neg.	20,614.98	94.27
4 Tirumayam			56.68	0.29	19,699.59	99.36
5 Pudukkottai			325.91	3.66	6,834.82	76.78
District			13,575.70	13.28	80,378.95	78.63

<i>Serial number and name of the taluk—cont.</i>			(AREA IN HECTARES)			
			<i>Tube wells.</i>		<i>Open wells.</i>	
			<i>Area.</i>	<i>Percentage to total area.</i>	<i>Area.</i>	<i>Percentage to total area.</i>
(1)			(6)	(7)	(8)	(9)
1 Arantangi .. ..			..	..	10,25.91	2.92
2 Alangudi			78.95	0.48	4,101.21	24.88
3 Kulattur .. ..			..	..	1,252.23	5.73
4 Tirumayam .. ..			..	..	70.85	0.35
5 Pudukkottai .. ..			..	..	1,740.89	19.56
District			78.95	0.48	8,191.09	8.01

Source: Small Farmers Development Agency, Pudukkottai—Draft Project Report, 1974.

<i>Serial number and name of the taluk.</i>				(AREA IN HECTARES.)		
				<i>Net area irrigated.</i>	<i>Area irrigated more than once.</i>	<i>Total irrigated area.</i>
(1)				(2)	(3)	(4)
1 Arantangi				35,138.87	4,921.86	40,060.75
2 Alangudi				16,487.85	3,176.11	19,663.90
3 Kulattur				21,869.23	504.45	22,373.63
4 Tirumayam				19,827.12	271.66	20,098.78
5 Pudukkottai				8,901.62	360.73	9,762.35
District				1,02,224.69	9,734.81	1,11,959.50

In the district as a whole 47.57 per cent of the net sown area is irrigated by one or other sources of irrigation. This is as high as 76.29 per cent in Arantangi since it benefits greatly from tanks and canals and is as low as 25.14 per cent in Pudukkottai since tanks and wells support a much lesser irrigated area.

Cropping pattern.—The gross sown area in the district is 229,682.98 hectares of which food crops occupy 1,65,171.25 hectares accounting for 71.91 per cent of the area. Over 80 per cent of the area in Arantangi and Tirumayam taluks and over 70 per cent of the area in Kulattur and Pudukkottai taluks are sown with food crops. Alangudi taluk has over 45 per cent of the area under non-food crops and emerges as the principal non-food crop zone among the five taluks, followed by Kulattur and Pudukkottai taluks. The following table contains details of cropped area in each taluk of Pudukkottai district in 1973-74 :—

Taluk.		Area under food crops.	Percentage to total area.	Area under non-food crops.	Percentage to total area.	Total food and non-food crops.
(1)		(2)	(3)	(4)	(5)	(6)
Arantangi	..	43,398.78	82.54	9,174.90	17.46	52,573.68
Alangudi	..	25,391.50	54.71	21,021.45	45.29	56,412.95
Kulattur	..	42,507.29	70.36	17,908.50	29.64	60,415.79
Tirumayam	..	28,010.52	84.01	5,329.15	15.99	33,339.67
Pudukkottai	..	25,863.16	70.01	11,077.73	29.99	36,940.89
District	..	165,171.25	71.91	64,511.73	18.09	229,682.98

Source:—Small Farmers Development Agency, Pudukkottai—Draft Project Report, December 1974.

The main food crops are cereals, pulses, fruit and vegetables which account for 87.79, 4.69 and 6.04 per cent, respectively of the total area under food crops. The area under cereals is predominantly concentrated in Arantangi taluk. While in Kulattur and Tirumayam taluks there exists a balance in coverage between cereals and pulses, in Alangudi and Pudukkottai taluka.

next to cereals, the largest coverage is under fruit and vegetables. The taluk-wise picture is presented in the following table :—

Distribution of food crops in Pudukkottai District.

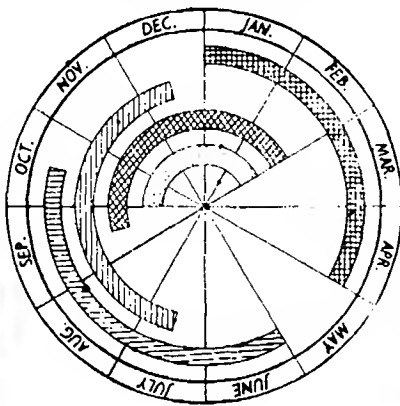
<i>Taluk.</i>	(AREA IN HECTARES.)					
	<i>Cereals.</i>	<i>Pulses.</i>	<i>Spices and condiments.</i>	<i>Sugar.</i>	<i>Fruits, cashewnuts and vegetables.</i>	<i>Total food crops.</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Arantangi ..	42504.05	36.03	381.78	204.85	272.07	43398.78
	(97.94)	(0.08)	(0.88)	(0.47)	(0.63)	(100.00)
Alangudi ..	21152.63	1536.03	505.26	27.13	2170.45	25391.50
	(83.31)	(6.04)	(1.99)	(0.11)	(8.55)	(100.00)
Kulattur ..	38431.17	3034.01	329.16	470.44	242.51	42507.29
	(90.41)	(7.14)	(0.77)	(1.11)	(0.57)	(100.00)
Tirumayam ..	24744.94	2615.38	182.18	126.32	341.20	28010.52
	(88.34)	(9.32)	(0.65)	(0.47)	(1.22)	(100.00)
Pudukkottai ..	18170.85	532.79	180.57	22.68	6956.27	25863.16
	(70.26)	(2.06)	(0.70)	(0.09)	(26.89)	(100.00)
District ..	145003.64	7754.24	1578.95	851.42	9983.00	165171.25
	(87.79)	(4.69)	(0.96)	(0.52)	(6.04)	(100.00)

Source : Small Farmers Development Agency Draft Report, Pudukkottai, December, 1974.

(figures in parentheses indicate percentage to total)

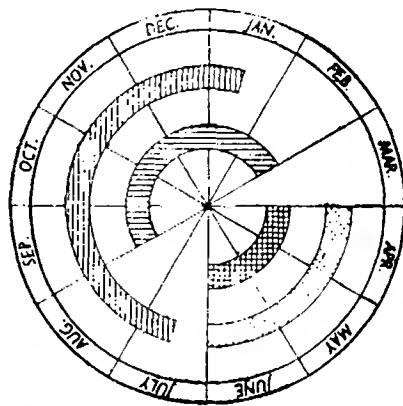
Among cereals, paddy is grown extensively during the first and second seasons in Arantangi taluk in the C.M.P. command area and under tank-fed systems. Other taluks also grow paddy, but in those, paddy is mostly confined to the first season when

**CROP CALENDAR FOR PUDUKKOTTAI DISTRICT
CANAL IRRIGATED REGIONS**



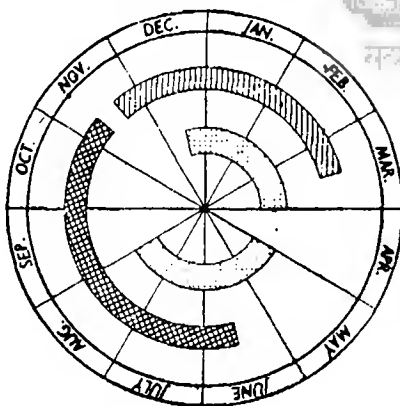
RICE KURUVAI
 RICE EARLY SAMBA
 RICE LATE SAMBA
 RICE THALADI
 GROUNDNUT

**CROP CALENDAR FOR PUDUKKOTTAI DISTRICT
TANK IRRIGATED WET LANDS**



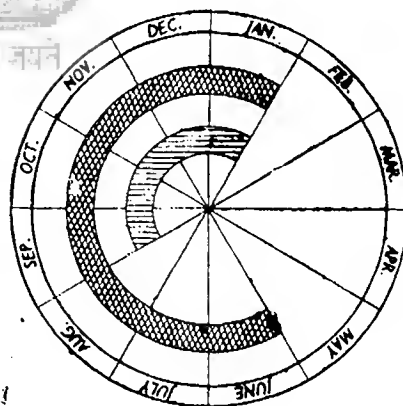
GINGELLY
 RICE SAMBA
 RAGI
 RICE RAINFED

**CROP CALENDAR FOR PUDUKKOTTAI DISTRICT
GARDEN LANDS**



RICE
 GROUNDNUT + REDGRAM
 MAIZE

**CROP CALENDAR FOR PUDUKKOTTAI DISTRICT
DRY LANDS**



CHOLAM
 GROUNDNUT + REDGRAM

water becomes available in the tanks on the arrival of early showers followed by the monsoon rains. Second season sowings of paddy are restricted to tank and canal-fed areas that have adequate water to support a second crop of paddy and most often supplemented by well irrigation. 87.79 per cent of the district's food area is devoted to cereals, of which 77.28 per cent is sown to paddy.

Other important crops are Varagu, Ragi, Maize, Cholan and other cereals, in that order.

Varagu is described in *Farmers of India* (1961) as a long duration crop which occupies the land for six months. The seed rate is 20 lbs. (9.04 kg.) when sown broadcast at the commencement of the south west monsoon. The crop is hardy, drought-resistant and relatively free from pests and diseases. Its yield ranges from 800 to 1,000 lbs. (362.98 to 452.48 kg.) per acre. When water stagnates in the field the varagu grains sometimes become poisonous in the raw state. Varagu straw is fed to cattle.

Ragi is grown on a wide range of conditions from very poor to very fertile soils. The irrigated crop is usually transplanted and the dry crop is raised in lines or sown broadcast in areas of abundant rainfall. The seed rate for ragi varies from 2 lbs. to 5 lbs. when the seedlings are transplanted and it is 8 lbs. on dry land.

The duration of the cholam crop according to this book, varies from 75 to 105 days and its height ranges from 2 feet to 15 feet. (0.6 to 4.50 m.) Cholan stalk and straw are considered to be very nutritious for cattle but in the early stages of its growth many of the dry land varieties are poisonous and sometimes fatal results follow when the green cholam is browsed by cattle. But this poison disappears at the flowering stage. The cultivated varieties of cholam can be distinguished by the structures of the earheads such as compact, loose or semi-compact earheads. Sometimes the colour of the grains serves to differentiate the varieties, such as yellow, pearl-white, cream-coloured, purple, brown or almost black-grains.

The maximum coverage under varagu, ragi and cholam are only in Kulattur taluk while the concentration of maize is seen in Alangudi and Pudukkottai taluks. The proportional distribution of paddy and millet areas as among the taluks is given in the table below :

Distribution of Cereals in Pudukkottai District—1973-74.

Taluk. (1)	Paddy. (2)	Varagu. (3)	(Area in hectares).		Maize. (5)
			Ragi. (4)		
Aranthangi	41,107.69 (96.72)	651.41 (1.53)	192.71 (0.45)		529.96 (1.25)
Alangudi	14,507.28 (68.58)	3,946.57 (18.66)	907.69 (4.29)		1,654.25 (7.82)
Kulattur	23,015.38 (59.89)	8,204.86 (21.35)	3,501.62 (9.11)		14.98 (0.04)
Tirumayam	21,762.75 (87.95)	1,598.78 (6.46)	945.75 (3.82)		51.01 (0.21)
Pudukkottai	11,662.35 (64.18)	4,906.48 (27.00)	364.37 (2.04)		1,104.86 (6.08)
District	1,12,055.45 (77.28)	19,308.10 (13.32)	5,912.14 (4.08)		3,355.06 (2.31)
	Cholam. (6)	Cumbu. (7)	Others. (8)		Total. (9)
Aranthangi .. ..	..	766.40 (Neg.)	21.88 (0.05)		42,904.05 (100.00)
Alangudi .. ..	..	136.03 (0.64)	0.81 (0.01)		21,152.63 (100.00)
Kulathur	2,934.41 (7.64)	264.37 (0.69)	495.55 (1.28)		38,431.17 (100.00)
Tirumayam	79.35 (0.32)	234.42 (0.95)	72.88 (0.29)		24,744.94 (100.00)
Pudukkottai	1.21 (0.01)	131.58 (0.72)	.. ..		18,170.85 (100.00)
District	3,014.97 (2.08)	766.80 (0.53)	591.12 (0.40)		1,45,003.64 (100.00)

(Figures in parentheses indicate percentage to total).

Source : Small Farmers Development Agency—Draft Report—Pudukkottai.
December 1974.

Pulses are sown in 7,754.24 hectares out of the foodcrop area of 165,171.25 hectares accounting for 4.69 per cent. The area under pulses is concentrated in Kulattur and Tirumayam taluk and to a lesser extent in Alangudi taluk.

This is explained by the fact that rainfall in Kulattur and Tirumayam taluks is comparatively less and hence the preference for a quick maturing short duration pulse crop. The nutrient status of the soils here is also poor and a leguminous crop suits such areas much better than a millet. Pudukkottai taluk has some area under pulses while Arantangi taluk has practically none.

Among pulses over one-third of the area is sown to red-gram, which is mostly grown in Alangudi and Kulattur taluks and to a lesser extent in Pudukkottai taluk. Next in importance is horse-gram occupying over one-fourth of the total area under pulses and its maximum concentration is in Kulattur taluk, and it accounts for the largest area in that taluk. Most of the district's area under green gram and other pulses are in Tirumayam taluk. The distribution of pulses crops in Pudukkottai District during 1973-74 is given in the table below :



(Area in hectares).

Taluk .	Redgram.	Horsegram.	Blackgram.
(1)	(2)	(3)	(4)
Arantangi	8.91 (24.73)	8.50 (23.59)	12.95 (35.94)
Alangudi	1,059.92 (69.00)	91.50 (5.96)	139.27 (0.07)
Kulattur	1,146.96 (37.80)	1,324.69 (43.66)	439.67 (14.49)
Tirumayam	103.64 (3.96)	550.61 (21.05)	1,051.01 (40.19)
Pudukkottai	473.68 (88.91)	29.55 (5.54)	29.56 (5.55)
District ..	2,793.11 (36.02)	2,004.85 (25.86)	1,672.46 (21.56)

					(Area in hectares).		
					Greengram.	Others.	Total pulse crops.
					(5)	(6)	(7)
Arantangi	..	..	..	..	4.85 (13.46)	0.82 (2.28)	6.03 (100.00)
Alangudi	..	..	..	..	91.50 (5.96)	153.84 (10.01)	1,536.03 (100.00)
Kulathur	..	..	..	..	74.90 (2.47)	47.79 (1.58)	3,034.01 (100.00)
Tirumayam	..	..	..	..	583.00 (22.29)	327.12 (12.51)	2,615.38 (100.00)
Pudukkottai	..	..	..	..	..	..	532.79 (100.00)
District	..	..	..	..	754.25 (9.73)	529.57 (6.83)	7,754.24 (100.00)

Source : Small Farmers Development Agency—Draft Report, Pudukkottai, December 1974.

Farmers of India (1961) describes these pulses as follows : There is nothing special about redgram cultivation. When the pods are ripe the entire plant is cut and after drying for a few days the stalks are beaten on the ground when the pea-like seeds emerge. The seeds are soaked in water mixed with red earth and the soaked seeds with the mixture of red earth are heaped in a mass over a wooden pestle laid flat on the ground and covered with gunny. After a day or two when germination starts the heap is broken up by lifting the pestle. The seeds are dried in the sun and the dal is obtained by removing the outer shell in a handmill.

Horsegram grows on the poorest of soils with the least trouble and the minimum of rainfall. It grows on dry lands when the season gets badly delayed and often comes to the rescue of the farmer when other crops fail. A common proverb says :

Kallai pirattai kollu vidhai.

(Turn over the stones and sow horsegram.)

The seed rate for sowing is 10 lb. to 12 lb. (4.52 to 5.43 kg.) as a mixture and 20 lb. to 25 lb. (9.05 to 11.31 kg.) as a pure crop and the acre yield ranges from 100 to 200 lb. (45.24 to 90.48 kg.) as mixture and from 400 to 600 lb. as a pure crop.

Greengram is generally sown in paddy fields just before the harvest of the paddy or as a mixture in dryland. The seed rate is 12 to 20 lb. (5.42 to 9.04 kg.) as a mixed crop. There are two varieties of greengram; one has a green seed coat while the other is grey in colour. The latter variety is longer in duration and is grown on drylands, while the green coated variety is raised on wetlands after the harvest of paddy. The dryland varieties are more vigorous and the yields are higher than those of the wet land varieties. The yields of green and black gram ranges from 200 to 500 lb. (90.48 to 226.24 kg.).

Fruits and vegetables are grown in nearly 10,000 hectares constituting 6.04 per cent of the area under foodcrops. The one and most important fruit crop accounting for substantial coverage is cashewnut cultivated extensively in Pudukkottai and Alangudi taluks. Pudukkottai has the largest area under cashewnut next to paddy. Mango and banana are also grown but in limited areas in all the five taluks.

Spices and condiments occupy less than one per cent of the area under foodcrops. The most important of the spice crops are the chillies. A relatively large area under these is in Alangudi taluk followed by a wide margin by Arantangi and Kulattur taluks. It is cultivated under garden land condition.

Among the sugar crops, sugarcane in Kulattur taluk and palms in Arantangi taluk are worth noting.

The area under-food crops is 64,511.74 hectares of which edible and non-edible oilseed crops account for 83.30 per cent of the area. Among the edible oilseeds groundnut occupies a prominent status cultivated in all the five taluks over an area of 50,786.63 hectares. Next to paddy the largest area is sown with groundnut in this district. Concentrations of groundnut area are in the taluks of Alangudi and Kulattur. The following table gives the distribution of non-food

crops in the Pudukkottai District:—

<i>Taluk.</i> (1)	<i>Fibre crops.</i> (2)	<i>Groundnut.</i> (3)	<i>Coconut.</i> (4)	<i>Gingell .</i> (5)
Arantangi	4.05 (0.44)	7,151.82 (77.95)	806.48 (8.79)	904.86 (9.86)
Alangudi .. ..	..	13,687.04 (65.11)	213.76 (1.02)	225.50 (1.07)
Kulattur	389.47 (2.17)	16,828.34 (93.97)	133.60 (0.75)	24.70 (0.14)
Tirumayam	102.43 (1.92)	4,288.66 (80.47)	312.55 (5.86)	44.93 (0.84)
Pudukkottai .. ..	..	8,830.77 (79.72)	93.52 (9.84)	115.79 (1.04)
District	495.95 (0.77)	50,786.63 (78.72)	1,559.91 (2.42)	1,315.78 (2.04)
	<i>Castor.</i> (6)	<i>Total edible & non-edible oil seeds.</i> (7)	<i>Other non- food crops.</i> (8)	<i>Total non- food crops.</i> (9)
Arantangi .. ..	..	8,863.56 (96.61)	311.34 (3.39)	9,174.90 (100.00)
Alangudi	5.67 (0.03)	14,197.57 (67.54)	6,823.88 (32.47)	21,021.45 (100.00)
Kulattur	1.62 (Neg.)	16,988.66 (94.86)	919.84 (15.14)	17,908.50 (100.00)
Tirumayam	2.43 (0.04)	4,648.58 (87.23)	680.57 (12.77)	5,329.15 (100.00)
Pudukkottai .. ..	..	9,049.49 (81.61)	2,437.24 (18.39)	11,077.73 (100.00)
District	9.72 (0.01)	53,738.86 (83.30)	10,772.87 (16.70)	64,511.74 (100.00)

Source: Small Farmers Development Agency Draft Report—Pudukkottai District, December 1974.

(Figures in parentheses indicate percentage to total.)

It would be pertinent to quote here from what M. S. Sivaraman has said on groundnut cultivation in *Farmers of India* : Groundnut is mainly raised as rainfed crop in June/July and the time of sowing depends upon the South-west monsoon rains. It can stand a rainfall of 50 to 55 inches (125 to 137.5 cms.) unlike some of the other dryland crops. It is also grown as a summer crop under

irrigation from February/March to June/July. Sowing is generally done in lines behind the country plough. The seed rate varies from 50 to 100 lb. (22.62 to 45.24 kg.) of groundnut depending upon the habit of growth and size of the seeds. The crop is intercultivated twice and harvested when the inside of the shell turns dark. The bunch variety is harvested by pulling out the plants with the hand while the spreading type is removed with the spade. Women and children attend to these operations and are paid a share of the nuts they gather. The groundnut haulms are stacked for use as cattle feed mixed with straw.

It is mostly grown in the fertile light sandy loams but so profitable is its cultivation that it has spread to the most unpromising soils except saline soils and low-lying wet-lands. It is an exhausting crop which requires a liberal supply of the manures applied on drylands. It is usual to give two to eight ploughing with the country plough before sowing groundnut. The optimum spacing is 9 inches (22.5 cms.) and 6 inches (15 cms.) either way for the spreading and bunch types respectively. This will require 75 lb. (33.94 kg.) of kernels for the spreading variety and 100 lb. (45.24 kg.) for the bunch variety. Groundnut is raised either, as a pure crop or as a mixture with cotton, castor, cholam, redgram or thinai. The mixed crop is found to be more remunerative than the pure crop though the yield of groundnut is depressed particularly in the case of the spreading types. Observations show that a cereal crop which follows groundnut does better than when it follows a cereal.

Groundnut is subject to several pests; jackals, squirrels, pigs and crows are fond of the seed and pick it up after it has been sown.

Hairy caterpillar attacks the plants in myriads and eats up the whole of the leaves. Another insect the 'sirul puchi' mines into the leaves which turn black and fall off.

Agriculture Research and Extension:- Anna Pannai, a Government owned farm named after the late Chief Minister of Tamil Nadu, C. N. Annadurai, is located in the Kudimiyamalai-Vayalagam reserve forest area in Kulattur taluk. It lies on the trunk road from Pudukkottai to Kodaikanal at a distance of 16 km. from the town. The farm was opened on September 6, 1967.

An area of over 320 hectares are available here for cultivation the rest being occupied by buildings, roads, wells, and tanks. Of this area 20 hectares have been transferred to Kalaigiar Karunanidhi Agricultural Experiment Institute and 30 hectares to the Zonal Nuclear seed Farm (Groundnut). A portion of the estate which is gravelly is unsuitable for cultivation purposes.

The size of its profit as shown in the table below has been steadily on the increase since its inception.

(IN RUPEES)

<i>Year.</i>		<i>Receipts.</i>	<i>Expenditure.</i>	<i>Profits.</i>
(1)		(2)	(3)	(4)
1968-69	.. ..	1,77,277.11	1,67,183.95	10,093.26
1969-70	.. ..	3,95,014.54	3,83,856.79	11,157.75
1970-71	.. ..	4,71,037.33	4,15,436.89	55,600.44
1971-72	.. ..	4,88,704.75	4,13,361.96	75,342.77
1972-73	.. ..	5,38,491.51	4,21,283.05	1,17,208.46
1973-74	.. ..	8,21,350.68	5,91,630.41	2,29,720.27

The total budget of the farm during 1973-74 was Rs. 5.46 lakhs.

So far over Rs. 32.20 lakhs have been invested on the farm. The annual profit-flow exceeds rupees two lakhs which by itself is commendable. The contribution which the farm is continuously making to the State's agronomy by its supply of quality seeds and supportive educational services, is not quantifiable.

The Kalaigiar Karunanidhi Agricultural Experiment Institute (KKA EI) is situated in the Anna Pannai in an area of 20 hectares. The centre started functioning on April 14, 1971. The Primary objective was conducting adaptive research programme (Field Verification Trials) on an intensive scale to support scientific extension work in the Pudukkottai and Tiruchirappalli districts. The major thrust of research has been to evolve crop patterns and management practices suitable for each of the specific agro-climatic zones in the district. The ultimate objective of the ventures is production increases per unit of time and space, so as to help the farmer at the micro-level (and, indirectly, the State) to realise higher outputs.

The Institute is headed by a Director who is supported by a team of Subject Matter Specialists in Agronomy, Farm Management, Agricultural Economics, Soil Science, Entomology, Pathology and Agricultural Engineering. Inter-disciplinary and multi-disciplinary approaches help to quickly resolve the biological and physical problems encountered in field applications of research findings. Besides, the organisation also attempts to identify emerging problems in the process of modernising agriculture. The activities so far undertaken in furtherance of the objectives can be broadly categorized under the following : —

(i) Adaptive research on evolution of multi-crop patterns, selection of suitable crop varieties and formulation of a package of practices.

(ii) Conducting crop response studies on important food and commercial crops and measures for reclaiming problem soils.

(iii) Undertaking water-use and management investigations for important crops and identifying more efficient and economic techniques of irrigation.

(iv) Designing dry farming technique and water harvesting methods and specifying remunerative crop-mixes and patterns most suited under uncertain rainfall situations.

(v) Testing and verifying plant protection chemicals and formulating optimum measures for pest and disease control.

(vi) Undertaking agro-economic investigations to identify problems in field application of innovations and related issues.

The extensive field verification trials conducted by this Institute have resulted in the selection of the Alangudi redgram variety two greengram varieties and one blackgram variety and the evolution and release of one greengram variety known as Rajendran. The introduction of Ponni and Bhavaní paddy varieties have been recommended for cultivation. As a result of systematic studies, it is now recommended that most of the single crop rainfed area can possibly grow two crops with a fair amount of certainty by adjusting sowings of crop varieties most relevant to the season.

The following research schemes in pulses are in progress at the Kalaignar Karunanidhi Agricultural Experiment Institute and its one sub-unit for finding ways and means for stepping up pulses production.

(i) Scheme for improvement of redgram and soyabean yield in Tamil Nadu.

(ii) Scheme for the intensification of Pulses Research.

(iii) Pilot scheme for improvement of wet land pulses in Tamil Nadu.

(iv) Scheme for the maximisation of production of pulses in Tamil Nadu.

The objectives are to (a) build up a germplasm bank for redgram, soyabean, greengram, blackgram and cowpea ;

(b) identify pure lines possessing desirable characters ;

(c) undertaking hybridisation work to evolve varieties with high yield potentials and other desirable features ; and

(d) formulate package of practices for stepping up pulses production.

In undertaking research on these issues the Institute Co-ordinates its activities with experimental stations within the State and at the national level. Such a rapport helps in updating technical knowledge and upgrading professional competence, so essential for research of this kind.

Multiplication and distribution of quality seeds of pulses, though they have received some attention earlier, came to be systematically organised under a specific programme only on the starting of the Pulses Experiment Station at Vamban, a village 12 km. east of Pudukkottai on the Pudukkottai-Alangudi road. The station was started on July 10, 1971 in a dis-reserved forest area of about 400 hectares. The major aim of this station is (a) production of breeder seeds for a multiplication of redgram, blackgram, greengram, cowpea and horsegram ; (b) undertaking manurial and bacterial fertilization trials on pulses ; (c) evaluation of promising drought resistance varieties of pulses and (d) formulating appropriate agronomic techniques including crop-mixes and intercropping.

The research findings have indicated that (i) the use of efficient strains of Rhizobial culture specific to crops (ii) judicious phosphatic fertilization ; (iii) adoption of proper agronomic practices ; and (iv) irrigation at critical phases of crop growth to make for higher yields.

The geophysical characteristics and ecological conditions of the district favour the raising of orchard crops of tropical nature. This district is already noted for good varieties of jack. Given research support and extension opportunities, the potential exists for variety of orchard crops like mango, guava, jack and other fruits. Towards this aim, a Tropical Fruit Station as one of the sub-centres of research of the K.K.A.E.I. has been started.

Anna Pannai is one of the premier centres in Tamil Nadu specialising in imparting on-the-job training to professionals. The major focus of the training is to improve the technical knowledge, professional competence and functional skill of field functionaries operating at different levels of hierarchical structure.

A scientific knowledge of farming becomes a potent instrument of change only when it finds field application. This is where the role and functions of the farming community assume significance. Their subject matter knowledge needs to be deepened and strengthened by a process of continuing education and "foremost among the measures to be adopted is Agricultural Education with a view to render such education practically useful."¹

Needed facilities for imparting training are incorporated in the K.K.A.E.I. Facilities for organising training programmes in the form of conference hall, exhibition, library, laboratory, auditorium, have been provided in the Institute.

The implementation of a field programme has two components. One is the input-supply mechanism and the other is the actual process of implementing it. Both these need to be synthesized for a productive outcome at the farm level.

1. Proceedings of the Diwan of Pudukkottai No. 1569, dated 31st December 1895, Agriculture.

The most important and critical input in agriculture is the supply of quality seeds. This should become available in adequate quantities and during the proper seasons to the farmers who need it. An organisation for the multiplication of good seeds and a mechanism for its distribution are, therefore, important. Besides, fertilizers and plant protection chemicals should also be made available to the farmers to increase the productive efficiency of their lands.

As one of the largest seed-production centres in Tamil Nadu. Anna Pannai produces hybrid millet seeds, high yielding varieties of paddy, millet, pulses, vegetable and other crops and introduction and evaluation of the recommended innovations.

One other unique activity of the Pannai is the production of foundation seeds of cumbu, cholam, maize and cotton which involves high technical and professional competence. This work is being handled here and the seeds so produced are being distributed to the State Farms and Private Seed Producers for multiplication as certified seeds and distribution to the farmers.

The more important varieties of seeds produced in the Anna Pannai are shown in the following table :

Serial number and the name of the seed.				1967-68.	1968-69.	1969-70.	1970-71.	1971-72.	1972-73.
(1)	(2)	(3)	(4)	(5)	(6)	(7)			
				(IN TONNES.)					
1.	HB 3 Cumbu (seeds)	..	..	1'124	8-896	18-370	16-500	10-155	
2.	Hybrid maize	..	..	3'324	21 888	25'038	20-000	30'335	
3.	Paddy	..	..	..	8'274	18-038	27'043	20-645	
4.	Redgram	..	..	0-730	22-750	9-264	8'032	14-332	7-331
	Blackgram	..	..	0-391	6-710	0-600	1-709	2-905	
6.	Greengram	..	..	0-122	0-273	3-085	2-503	4-991	
7.	Horsegram	..	..	0-603	1-901	10-400	4-950	3-709	2-270
8.	Vegetables	..	..	0-002	0-465	1-479	5-113	2-504	2-409
9.	Groundnut	..	..	0-550	21-000	30-888	48-257	30-064	21-401

It also co-ordinates its activities with the Indian Agricultural Research Institute, New Delhi, and takes up seed projects relating to the screening of disease-resistant varieties in cumbu and similar points of problem-oriented research. Recently, under a national

programme for producing 'foundation' seeds, especially in cumbu- this farm has taken up the large scale production of some of the recently isolated new male sterile lines.

Besides millets, multiplication of breeder seed in groundnut, castor, gingelly and sunflower has also been taken up under the zonal nuclear farm programme in an area of 30 hectares. Seeds multiplied here are distributed to the farmers through 23 agricultural depots of the State's Department of Agriculture. Annually, over 100 tonnes of paddy and other seeds are distributed through these. Farmers have come increasingly to realise the significance of seed in the production process, and the demand for quality seeds is, as a result going up rapidly. This has opened avenues for the private seed trade to enter the seed market competitively. Private sales centres have emerged at strategic locations.

The wholesale distribution of pool fertilizers is done through the Tamil Nadu Co-operative Marketing Federation at the district level and by the Co-operative Credit Societies at the village level. There are 117 co-operative sale points which distributed over 1,300 tonnes of nitrogen, nearly 400 tonnes of P_2O_5 and 100 tonnes of K_2O during 1973-74. The non-pool fertilizers are distributed through 117 village-level co-operative credit societies and 216 private sale points. During 1973-74, over 1,700 tonnes of nitrogen, 1,100 tonnes of P_2O_5 and 800 tonnes of K_2O were distributed through private trade. The annual offtake is over 3,000 tonnes of Nitrogen, 1,500 tonnes of P_2O_5 and 900 tonnes of K_2O , the ratio of N : P : K being 10 : 5 : 3.

Of the total consumption, over 55 per cent of nitrogen and K_2O , 60 per cent of P_2O_5 are consumed in one taluk of Arantangi alone and that too mostly in CMP command area.

Paddy is the one intensively fertilized crop. Preferred fertilizers are 17 : 17 : 17 complex for basal dressing, supplemented by urea and ammonium sulphate for top dressing purpose. The consumption of N : P : K in kg. per hectare of irrigated area is 27 : 13 : 8.

Fertilizer use-efficiency is greatly increased when augmented by adequate application of organic manures like compost. Its manufacture using local manurial resources, nightsoil, urban refuse and wastes have been taken up under the Compose Development Scheme. Annually, nearly 10,000 tonnes of compose are prepared and distributed to the farmers. Green manure is one other important source of organic manures. Farmers are encouraged to grow green manure during fallow periods, in between two crops and on waste lands, since this is one of the cheapest means to enrich, arable soils and reclaim problem soils. Nearly 30 tonnes of green manure seeds are distributed to farmers annually.

Insecticides, fungicides and rodenticides are also finding increasing application, particularly under irrigated agriculture in Pudukkottai district. The consumption of plant protection chemicals was over 730 tonnes in dust form and over 4,800 litres in liquid formulation in 1973-74. Farmers have realised the efficiency of plant protection chemicals in the control of crop pests and diseases and consequently the area under plant protection coverage during 1973-74 was 1,19,00 hectares. To ensure efficiency in application, timeliness in operation, and quickness of coverage with chemicals, plant protection equipments are invaluable. To help farmers, dusters and sprayers are distributed at subsidised rates under the Plant Protection Scheme. During the past two years, over 300 such equipments have been distributed through the agency of Government. At present 49 dusters and 1569 sprayers are in stock in the district, of which 17 dusters and 230 sprayers are with the farmers, and 174 dusters and 857 sprayers are with agricultural depots and co-operative institutions. The equipments owned by the latter organisations are let on hire on nominal charges to those farmers who need it but may not be in a position to own it.

Crop-Specific Schemes.—Development schemes have been designed specially to increase production of paddy, millets, pulses, groundnut, cashewnut, and coconuts. The zones more eminently suited for one or more of the above crops are identified and concentration of efforts made in them to provide needed facilities. This will be achieved by extending the area under cultivation of these crops and intensifying the techniques of production.

The high-yielding varieties programme under paddy covers the entire district and the objective is one of large scale replacement of conventional paddy varieties with the new introduction-complemented by a package application of recommended innovations. Arantangi taluk with a fairly assured irrigation framework has had better opportunities to specialise in paddy production. This taluk as a part of Thanjavur district until 14th January 1974 has been under the Intensive Agricultural District Programme for the past one decade and more. Under millets, the emphasis is on large scale extension of hybrid maize, hybrid cumbu and ragi. Maize and cumbu hybrids have established their superior performance capabilities over local varieties under field conditions and have gained widespread acceptance. A special programme for extending maize cultivation in potential pockets adopting scientific methods is in operation.

A crash scheme for an intensification of the production of the three pulses is in progress. The most favoured zones are in Alangudi, Kulattur and Tirumayam taluks. The programme envisages covering over 18,000 hectares every year.

Among oilseeds, groundnut occupies an important place, as it is a valuable commercial crop, amenable to cultivation in wet, garden and dry land areas and during both the seasons.

Alangudi, Kulattur and Pudukkottai taluks and the CMP area in Arantangi are found to offer good opportunities for groundnut cropping.

To step up the production of oilseeds, particularly groundnut, a package scheme is functioning in this district since September 1, 1974. The objectives of this scheme is to organise zonal, primary and secondary seed farms and make available quality seeds to the farmers with supportive technological services. The scheme also extends its operation to cover gingelly and sunflower. Coconut is one other oilseed offering immense possibilities for area expansion and intensification of practices, particularly in the coastal belt.

Among dry fruits, cashewnut is grown in Alangudi and Pudukkottai taluks. The size and shape of the cashew trees growing wild in isolated patches, burdened with fruits and flowers and

forming a dome-shaped canopy over the ground, impresses upon the visitor this tract's potential to grow this dollar-earning crop. Farmers have come to evince interest in cashewnut cultivation. To encourage them a cashew development scheme is in operation under which besides technical services, loan facilities are also extended for rising the crop in an orchard scale.

Cotton, sugarcane, sweet potato and tapioca are the other crops which are being tried on a limited scale under the development scheme to popularise their cultivation on scientific lines.

Integrated Dry Land Agricultural Development Project.—This is a project sponsored by the Government of India. Pudukkottai is one of two centres in Tamil Nadu selected for the purpose.

Rainfed areas grow only one crop a year and that too under precarious conditions. The timelines of the rainfall, distribution and intensity greatly affect the crop performance. Crop failures are very common, depriving the farmer and his livestock of their minimum food and fodder needs. These areas are, hence, regarded as highly, 'risk-prone'. The objective of the project is to devise location-specific measures towards risk minimisation by extending a package of services and facilities.

Developmental strategies concentrate on utilisation of water, harvesting and 'run-off' farming techniques, use of appropriate agricultural machinery and equipment for dry land agriculture, use of minimum supplemental irrigation practices at critical phases of crop growth and adopting crop sequences and agronomic practices such as fertilizer under dry-land situations.

The project's action programme involves technical services and input supply including credit, land levelling and land shaping, digging up new wells and deepening old ones, installing power lifts and introduction of mixed enterprises and extending cash grants and subsidies. These and other facilities help in making technology accessible to the dry land farmers. The Project was started on September 6, 1971 and covered 800 hectares in three villages of Tiruvarangulam Panchayat Union during 1971-72. It was extended to another 800 hectares in five villages in 1972-73. Up to 1974-75, twelve villages in Alangudi taluk had come under the project.

Twenty rainfed tanks in seven villages have been renovated, at a cost of Rs. 1.98 lakhs thus increasing their storage capacity and command area, besides recharging the underground water potentials. Over 35 new wells have been sunk and 47 old wells deepened thus increasing the irrigated coverage. Sixty-three electric motor pumpsets and 3 oil engines have been installed. Soil conservation measures and land levelling have been completed in about 70 hectares. Package demonstration on groundnut, cumbu and ragi supported by extension education activities like farmers' training and field visits have paved the way for large scale adoption of recommended technology.

To encourage mixed farming practices, dairy animals, sheep, and goats, pigs and poultry birds have been supplied to farmers to strengthen their capital base and increase their income earning capabilities.

This is an integrated project involving many disciplines like agronomy, water management, agricultural engineering, plant protection and animal husbandry. An organisation consisting subject-matter specialists in all these disciplines, headed by a Project Officer and supported by field level functionaries is operating with headquarters at Pudukkottai. To synthesize the functions and co-ordinate the Project activities with other developmental agencies a District Land Co-ordination Committee and a State Land Co-ordination Committee have been constituted. To look after its day-to-day administration, there is a Project Implementation Committee headed by the Director, K.K.A.E.I.

Small Farmers Development Agency.—This scheme is specifically designed to enable small farms to become economically viable. Though conceptually it is difficult to define a small farm or farmer, "under the existing farming practices in India holdings of less than five acres are uneconomic and unprofitable as they do not provide adequate employment to the available family labour and bullock labour and generate surplus over and above farm family requirements".¹

1. A. M. Khusró ; *An approach to Farm Planning among small Farmers ; Seminar-cum-Workshop on Problems of Farm Production Planning and Programming* Indian Society of Agricultural Economics (1964) pp. 105-6.

For the purpose of this scheme, small farmers have been defined as those having 1.25 to 2.50 acres of wet land or 2.50 to 5 acres of dry land. Those owning lesser than this base level are designated as marginal farmers.

The objective of the scheme is to identify potentially viable small farmers in compact geographical units and assist them with physical facilities and technical knowhow at the pre-harvest and post harvest stages to help them emerge as economically viable farmers.

It is estimated that there are 1.25 lakhs of small and marginal farmers in this district and the proportion between small and marginal farmers is assessed to be 1:2. The identified farmers will be provided with the needed production requisites like seeds, fertilizers, plant protection chemicals and the necessary credit for their purchase through institutional agencies.

The crop husbandry programme will include intensive agriculture, multiple cropping, introduction of high yielding varieties, new crops and crop patterns, horticulture, kitchen gardening location—specific package of practices, demonstration farms, dry farming practices and water harvesting techniques. Other enterprises like dairying, poultry, sheep rearing, piggery and such others found most appropriate for the area will be introduced. In zones with adequate bee pasturage, bee keeping will be taken up. Construction of gobar gas plant is also included in the programme.

Supporting services will be provided both at the community level and farm level which includes minor irrigation, land reclamation, land levelling and shaping, soil conservation, digging new wells, deepening old wells, supply of power lifts, agricultural implements and equipments, custom hiring and such other services and facilities that may be found necessary.

Co-operative Banks, Land Development Banks and Nationalised banks will be the agencies through which loans will be arranged for community works and farmers. To cover the possible risks

in recovery of loans advanced to this category of farmers, a 'risk fund' of six per cent will be allowed in case of short and medium term loans and two per cent in case of long term loans. With a view to motivate the farmers to participate in the programme and avail of the technological benefits incentives by way of massive subsidies have been provided in the scheme.

The estimated cost of the project is Rs. 1,50 lakhs, of which schemes under agriculture and minor irrigation account for over Rs. 30 lakhs and Rs. 65 lakhs respectively.

An organisation designed to fulfil the above objectives is in position headed by a Project Officer, with supporting supervisory personnel and field functionaries. To ensure co-ordination with the sister developmental institutions at the district level a co-ordination committee has been constituted with the Collector as Chairman and the Project Officer as Member-Secretary.

Infrastructure.—The district cannot be said to have a good network of roads. Out of 758 villages only 316 have pucca roads and 336 are connected by kutchra roads only. The remaining 103 villages yet remain inaccessible to any regular modes of transport and are connected by traditional pathways and irregular routes.

The district is served by 78.1 km. of State Highways- 420.2 km. of Major District Road, 676.7 km. of Other District Roads, 1,014.10 km. of Panchayat Union Roads and 510.20 km. of Panchayat Road, making up a total of 2,699.30 km. of road length. The State Highways connecting Thanjavur and Manamadurai passes through Pudukkottai traversing most of its length in Tiruvarankulam Panchayat Union area, and connects Gandarvakottai, Adanakkottai, Pudukkottai and Tirumayam.

All the important towns and major panchayats are either connected to the Major District Roads or Other District Roads. The length of the road per sq. km. is 0.58 and the length of the road

per 100,000 population is 28.4 km. as against the State average of 65.1. The road average among the Panchayat Unions is as follows :

(LENGTH IN KILOMETRES.)

<i>Name of the Panchayat Union.</i>	<i>National Highway.</i>	<i>State Highway.</i>	<i>Major District Road.</i>	<i>Other District Road.</i>	<i>Panchayat Union Road.</i>	<i>Panchayat Road.</i>	<i>Total length</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Kunnandarkoil	9.0	70.8	11.0	28.4	119.2
Thiruvankulam	60.6	105.5	100.9	266.0	10.4	533.4
Arimalam	8.2	11.8	63.8	113.2	33.2	230.2
Karambakudi	22.0	51.6	127.6	22.6	223.8
Ponnamaravathi	17.9	69.6	8.2	49.6	145.3
Annavasal	43.0	71.8	26.8	58.4	200.0
Viralimalai	59.2	78.4	26.6	5.2	169.4
Tirumayam	19.3	21.0	43.5	22.6	10.8	117.2
Arantangi	78.4	56.2	201.3	167.4	503.3
Avudayarkoil	52.4	70.1	210.8	124.2	457.5
Total	78.1	420.2	676.7	1014.1	510.2	2,699.3

Source ; Divisional Engineer (Highways), Pudukkottai.

The mode of transport of agricultural commodities is mostly by bullock carts. M. Krishnan has observed¹ quite pertinently : "I cannot imagine an India without bullocks and carts. Through centuries of conquest, opulence famine and strife, it was the unobtrusive bullock that made agriculture, transport and life possible. Even today no countryside landscape would be complete without the bullock-cart, and it is still what moves our rural economy. Few people know how many thousand miles of cart-way are listed in official statistics, but it is safe to double this mileage without exaggeration, for like the jeep the bullock-cart is independent of roads. Many of the paths it takes are just a pair of parallel, hardly visible wheel tracks in the scrub, and often it leaves the earth-blazed train altogether and goes cross-country".

¹ *Jungle and Backyard*, 1961.

The use of trucks and lorries is observed to be very limited.

Railways cover a distance of 83.4 kms. The railway line connecting Tiruchirappalli with Karaikudi runs more or less through the centre of the district, covering the Panchayat Unions of Viralimalai, Kunnadarkovil, Annavasal, Tiruvarangulam, Arimalam and Tirumayam. The Pudukkottai-Karaikudi railway line covering a distance of 22.4 kms. passes through Arantangi.

Energy.—In the whole of the district, there are only 38 tractors, of which 19 are in Arantangi taluk, six in Pudukkottai and five in Alangudi. The process of mechanisation has not made much headway in this district, though there exists immense scope for the use of small horse-power electric motor pumpsets for water lifting purposes.

Rural electrification for domestic and farm purposes has been extended to 1,875 hamlets in 410 main villages. This covers only 54 per cent of the total villages leaving yet a big leeway to be made up. Out of 1.35 crores units of electric power consumed, 34.05 per cent is for agricultural purposes.

The Cash Nexus.—“ Nothing can be greater boon to the poor ryots than the loans granted by the Sircar for agricultural purposes such as well digging, purchase of stock, improvement of land and things allied—loans have been freely taken and carefully and profitably utilized and punctually returned. Conditions may be simplified, undue delay and vexatious waiting at cutcheries may be avoided..... It is of course highly desirable to make the ryots depend on themselves and on their industry, instead of looking up either to the Government or to the usurer. This could not be done in the present state of their ignorance, prejudice and superstition. It is education that could render possible the formation of agricultural co-operative rural societies or banks”. (The then Diwan of Pudukkottai in Proceedings dated, 31st December 1895.)

The source of funding for agricultural development today are institutional and non-institutional agencies. Government as well as co-operatives and nationalised commercial banks have entered the field of farm-financing. Rural credit co-operatives have

been established at viable centres to make funds accessible. Similarly, banks are expanding their operations in the rural sector under a phased programme.

There are 140 co-operative agricultural credit societies and agricultural banks in the district serving 758 villages with an aggregate membership of 1,57,832. The paid-up share capital exceeds Rs. 54,11,307. During 1974-75 co-operatives advanced Rs. 2.35 crores as crop loans in cash and kind, the outstanding balances exceeding two crores. The volume of credit advanced has shown a three-fold increase over a span of four years (1971-72 to 1974-75). This factor has been represented in the table presented below :

CROP LOANS ADVANCED BY CO-OPERATIVES

(RUPEES IN LAKHS.)

Crop. (1)	Acreage bene- fited. (2)	1973-74 (Amount).		Total. (5)
		Cash. (3)	Kind. (4)	
Paddy	21,132	58.57	4.83	63.40
Groundnut	22,785	64.06	4.29	68.35
Chillies	4,614	16.07	0.08	16.15
Sugarcane	1,340	6.48	0.23	6.71
Cotton	504	2.10	0.04	2.14
Ragi	162	0.54	0.01	0.55
Yams and Turmeric	368	1.96	0.05	2.01
Gingelly	1,320	4.95	..	4.95
Maize	18	0.04	0.03	0.07
Banana .. .. .	..	..	..	..
Taploca .. .. .	..	..	..	..
Sunflower .. .. .	..	..	..	..
Total ..	52,240	154.77	9.56	164.33

AGRICULTURE AND IRRIGATION

CROP LOANS ADVANCED BY CO-OPERATIVES—*cont.*

					(RUPEES IN LAKHS.)			
Crop.					Acreage bene- fited.	1974-75 (Amount.)		Total.
						Cash.	Kind.	
(1)					(2)	(3)	(4)	(5)
Paddy	..	..	..	..	40,603	86.50	32.48	118.98
Groundnut	..	..	..	..	26,296	70.58	8.31	78.89
Chillies	..	..	..	..	4,189	12.41	2.25	14.66
Sugarcane	..	..	..	..	568	2.84	0.28	3.12
Cotton	..	..	..	..	321	1.28	0.09	1.37
Ragi	..	..	..	..	303	1.05	0.18	1.23
Yams and Turmeric	..	..	..	..	362	1.89	0.13	2.02
Gingelly	..	..	..	..	4,564	13.69	..	13.69
Maize	..	..	..	..	158	0.42	0.21	0.63
Banana	..	..	..	..	7	0.06	0.02	0.08
Tapioca	..	..	..	..	6	0.03	..	0.03
Sunflower	..	..	..	..	122	0.46	0.03	0.49
Total					16,499	191.22	43.98	235.19

The State Land Development Bank has one branch at Pudukkottai with eleven primary Land Development Banks. During 1974-75, these advanced Rs. 51.28 lakhs of which Rs. 22.05 lakhs was for sinking and constructing new wells and Rs. 11.56 lakhs for the purchase and installation of pumpsets. So irrigation-development alone accounted for over Rs. 33.60 lakhs, becoming thereby the major motivation for farm credit.

The following table gives figures on Loans Advanced by Land Development Bank during 1974-75 :

Serial number and purpose.	(RS IN LAKHS.)	
	in Amount	Percentage to the total.
1 For sinking and construction of new wells	22.05	42.99
2 For boring, deepening and repairs of old wells	6.20	12.09
3 For purchase and installation of pumpsets	11.56	22.54
4 For purchase of machineries and implements	3.01	5.87
5 Land reclamation	1.20	2.34
6 For other purposes	7.26	14.17
Total ..	51.28	100.00

The Indian Overseas Bank has been extending financial assistance under the 'Lead Bank' Scheme since 1969. Villages within a radius of 25 km. of the Pudukkottai and Keeranur cover the area of operation. Medium and short-term loans amounting to over two lakhs rupees were provided in this period to 109 loanees; besides, a sum exceeding two lakhs rupees as jewel loans for agricultural purposes.

Assets and Liabilities - A Balance Sheet.

The pace of agricultural development in an area is conditioned by the strength of assets, represented by the qualitative and quantitative characteristics of soil, water, climate and other natural resources. An assessment of their current state and potential *vis-à-vis* the dimension of the liabilities inherent in the terrain helps to comprehend 'what is' and 'what needs to be done.' This is attempted here in a brief manner while recognising the difficulties in quantifying many of the variables and their pattern of interaction.

(i) *Land*.—The gross cropped area in the Pudukkottai is less than 50 per cent while the State average is over 58 per cent. The net area sown nearly equals the Tamil Nadu average, but the area sown more than once is just 3.2 per cent and is less than one third of the State percentage.

The district is exposed to the menace of wind erosion from July—August onwards, and of water erosion from September to November. Imperceptibly, the arable land gets damaged. The areas badly affected lie in the undulating plains and rainfed tracts with poor or no vegetable cover. Soil conservation measures have helped to arrest the drift, but much remains to be accomplished yet.

But the undulating areas and hilly slopes, along with the district's coastal belts, poramboke lands and scrub jungle areas are capable of supporting a variety of economically useful trees and vegetation. Besides, extensive foreshore areas of nearly 5,000 tanks, river and canal banks are ideally suited for social forestry purposes. The area under forests is just about 5.5 per cent.

Potential is there for farm forestry and afforestation programme in over 31,000 hectares. Such areas are to be identified and delineated.

Reclamation of cultivable waste lands in about 20,000 hectares and other fallow lands in over 22,000 hectares and stepping up the 'area sown more than once' by appropriate land use strategies would help to strengthen the asset structure.

(ii) *Soils*.—The soil survey studies, though confined to a certain segment of the district bring out the wide ranging characteristics of topography, relief and drainage and also the profile characteristics, horizon-wise such as thickness, colour texture, structure, consistency, permeability, reaction, root penetration, concretions, etc. In general the red sterile soils cover an area of 2,755 sq. km. followed by river alluvium in 1,536 sq. km. Saline coastal alluvium occur along the sea coast and occupy an area of 440. sq. Km.

The red sterile soils are slightly acidic and contain total soluble salts in harmless amounts. The fertility status is low. Under ill drained conditions the soils tend to become neutral to slightly alkaline. Total salts are present in critical to injurious amounts. But a variety of millet crops, pulses and groundnut can be grown in these soils. Cashew comes up well.

Agriculturally 'river alluvium' soils are better suited for growing paddy, banana, pulses, cotton and groundnut. Plant nutrients are present in low amounts and they respond well to scientific management techniques.

Under the aegis of the Tamil Nadu Government's Department of Agriculture, the Soil Survey and Land use Organisation units at Coimbatore and Thanjavur, have undertaken and completed soil surveys based on the methodology of the 'Standard Soil Survey' in the Arantangi taluk and localised regions in the Kudi miyamalai State Seed Farm area, Vamban Experimental Station-area and Villages selected for the Integrated Dryland Agricultural Development Project in Pudukkottai District. The outcome of the survey, though location specific, generally represents the position in the district.

The rock formation in the major portion of Arantangi taluk is sandstone of tertiary origin coupled with lateritic parent material. The lateritic area gradually narrows towards the north-west of the taluk until it reaches the alluvium of the river streams. In the other areas surveyed the rock formations are granite and gneiss. In general the soils are lateritic with plinthite formation in the sub horizon. In areas adjacent to the river courses and drainage pockets the soils are calcareous and sometimes alkaline. Weathered calcareous gneiss, laterite with quartz and ferruginous gravel from the parent material.

In Arantangi taluk four soil series (Avadayar koil, Pattukkottai, Madukkur and Vallam) have been identified. The extent of their coverage and main characteristic are shown in the following table :

<i>Serial number and Soil Series.</i>	<i>Map Sym- bol.</i>	<i>Area in sq. km.</i>	<i>Area in hectares.</i>	<i>Per- centage.</i>
(1)	(2)	(3)	(4)	(5)
1 Avadayar koil ..	Avk.	503.11	50,331.98	48.86
2 Pattukkottai ..	Pkt.	263.71	26,382.51	25.61
3 Madukkur ..	Mak.	133.93	13,398.54	13.01
4 Vallam	Vlm.	72.13	7,216.80	7.00
5 Coastal sand ..	....	56.85	5,687.49	5.52
Total		10,29.73	1,03,017.32	100.00

Besides these series, coastal sand also occupies a vast extent adjacent to sea.

The Avadayarkoil series covers the largest area of the taluk accounting for 503.11km. or about forty-five per cent of the total area. It comprises very deep clay loam, yellowish, brown in-situ soils developed from latest parent materials. The surface clay loam texture is underlined by clay texture. The soil is imperfectly drained with slow to very slow permeability.

If the drainage and permeability are improved, a variety of food and commercial crops can be grown in this series under irrigation. The calcareous nature of the sub-surface can also be helpful in maximising production.

The Pudukkottai series covers an area of 263.71 sq. km. accounting for about twenty-six per cent of the total area. It comprises very deep yellowish brown sandy loam soils with sandy clay loam sub-soil. These soils are developed from laterite parent material and are non-calcareous. They have yellowish brown mottlings in the sub-soil.

The fertility status of the series is very low, but the drainage and permeability are highly suited for cultivation of a variety of crops under irrigation. Application of organic manures like green manure can improve the fertility status of the soil considerably. The soils are well suited for garden-land farming and respond well to management practices.

The Madukkur series covers 133.93 sq. km. and occupies 13.01 per cent of the total area. The soils in this series are deep to very deep and non-calcareous, mostly occupying the middle to gentle slopes of the relief. It is well drained with moderate to moderately rapid permeability.

While the drainage and permeability of the series is satisfactory, its fertility is low. It can, however, be supplemented by judicious fertilizer practices. Incorporation of bulky organic manures and green manures can substantially improve the fertility status. Paddy and a variety of food and commercial crops can be successfully grown by adopting scientific management techniques.

The Vallam series occupies 72.13 sq. km. covering an extent of seven per cent. It usually occupies the topmost portions of the landscape. The soils are medium to deep and non-calcareous. It is very well drained with moderately rapid to rapid permeability.

Its fertility status is poor. But it offers scope for improvement by judicious manurial practices. Soil conservation measures like contour-bunding, contour cultivation and strip-cropping with

leguminous crops are indicated. Cashew and Eucalyptus plantations come up well in these series. Coastal sand covers areas adjoining the sea and occupies 56.85 sq. km. accounting for a little over five and half per cent of the area. The coastal sand comprises very deep, dark yellowish brown, fine sandy soils formed by the tidal deposits. Shells are present in the bottom layers. It is excessively drained with very rapid permeability.

The fertility status and water holding capacity are very low. The raising of coconut plantations on an extensive scale is in vogue in this land. Casuarine and eucalyptus plantations can be remunerative here and help in conserving soil and water. Establishing salt industries on modern lines can also prove profitable.

The saline coastal alluvium occur along the sea coast as a narrow belt. Drainage is moderately good in the surface but very poor below. The soils are marked by their mild alkalinity and high salinity. They are low in total phosphorous and lime, and medium in total potassium and organic carbon. Saline resistant paddy varieties and millets like ragi can be grown. Coconut comes up well in these soils.

An assorted variety of annual and perennial crops are grown in the above mentioned soils, but as can be expected, their productivity pattern differs. This is due to the differing fertility status of the soil, which ranges from poor to medium. Much needs to be done to improve them. 'Problem' soils, fortunately, are not of extensive in nature. Alkaline patches in the tankfed areas and saline soils along the coastal belt also do not pose much problems in manipulating them for production purposes. The fertility level of the Pudukkottai soils in general can be stepped up by incorporating successive doses of organic manure. With higher level of technology, they can be made more productive with less capital investment.

(iii) *Water*.—The scarcity of irrigation water has been discussed earlier. This is critically limiting the crop production potential of Pudukkottai district. Inadequate and erratic rainfall,

poor and undependable surface flows vitiate against crop prospects. The geophysical conditions of half the district do not favour a high infiltration rate either, thereby restricting the scope for digging of more of open wells to supplement the risky surface flows. Capital intensive deep bore wells are beyond the reach of the average farmer. Shallow wells with a poor command do not augur well for a dynamic farming system. Under such a precariously balanced situation, even a marginal deficiency in rainfall creates more than proportionate damage on the agrarian economy.

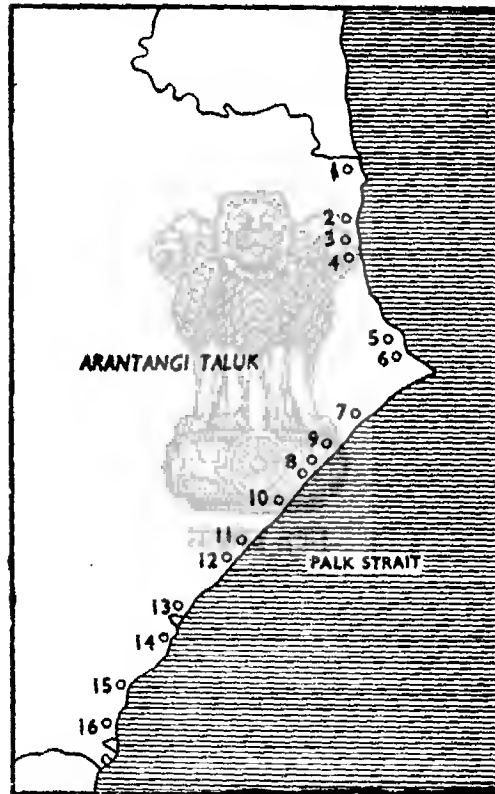
Over 87 per cent of the area is devoted to cereals and nearly 78 per cent of this area is sown to paddy—a crop highly exacting in its water requirements. A water-scarcity district is now affording the luxury of a water-demanding crop. Over 80 per cent of the area in Arantangi and Tirumayam taluks and over 75 per cent of the area in Kulattur and Pudukkottai taluks are sown with food crops. Alangudi is the only taluk which emerges as a non-food crop zone. Concentration of areas in pulses is mainly in Kulattur and Tirumayam taluks and understandably so because of low rainfall, hardy nature, and comparatively quick maturing nature of pulses. Kulattur followed by Alangudi has the largest area under redgram. Localisation of horsegram is seen in Kulattur, and black gram and greengram in Tirumayam.

Among the perennials, cashewnut account for substantial coverage in Pudukkottai and Alangudi taluks. Pudukkottai has the largest area under cashewnut next to paddy. What is required is rationalisation of crop patterns and systems and an enterprise-mix consistent with situational environs.

Exploratory drilling studies have indicated the potential for ground water development to a certain extent in the eastern portion of the district. Identifying the potential water-bearing zones and extending personalised technical service-cum-guidance and financial support will assist farmers in going in for deep bore wells. Locating the spots for digging wells, mapping out their distribution pattern and determining the extent to which ground water extraction can be permitted to eliminate over-exploitation in the long run, are the steps indicated for Pudukkottai. The

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THE PUDUKKOTTAI COASTLINE
WITH FISHING VILLAGES



SCALE 1 INCH 6 MILES (1 : 380160)

FIG. 1

currently available water management-cum-water harvesting technologies can find wide ranging applicability in water deficit tracts like Pudukkottai.

The development of such a situation would open up the technical feasibility, of increasing not only cropping intensities but also crop diversification.

(iv) *Livestock resources*.—The aggregate population of cattle and buffaloes is 5.98 lakhs of which cattle account for nearly 80 per cent. The population of mild * animals (both cow and buffalo) has shown a substantial increase in 1974 over the 1965 census, indicating the emerging prospects of dairying. Similar has been the case with respect to poultry birds. One disturbing feature, however, has been the phenomenal increase in the stray and scrub cattle population in both the categories. Research programmes now underway in the District Livestock Farm will help in improving the quality of the local stock of cattle, sheep goat, pigs and poultry birds.

(v) *Technology*.—Farm-based research efforts can help in the design and evolution of an agricultural system which strengthens the farm economy at the grassroots level. The process of innovative extension has already come into being with the setting up of the Kalignar Karunanidhi Experimental Institute, to serve the triple objectives of research, extension and training.

Farmer-response to technology-based changes has, in general been favourable. Innovations have moved fast in areas enjoying assured irrigation such as Arantangi.

FISHERIES.

The leaping wealth of the tide.—The tanks in Pudukkottai district, though numerous and connected with one another, mostly depend on rain and partly on seasonal streams. A few of the tanks in Arantangi Taluk are fed by Grand Anicut Canal. The fishes, normally found in the inland waters, are *Cirrhina cirrhosa* or white crap (வெண் கெண்டை) *Cirrhina reba* (அளிஞ்சான்)

Labeo cabbasu (காக்கா மீன், கருஞ்சேல்), **Labeo kontius** or **Cauvery Carp** (கருமுழிக்கெண்டை), **Labeo fimbriatus** or **Fingelipped carp** (சேல்கெண்டை), **Puntius spp** (சல்லி கெண்டை), **Mystus vittatus** or **cat fish** (கெளுத்தி), **Clarias batrachus** or **Cat fish** (கருபுத்தேளி), **Channa Spp** or **Snake head** (கொரவை) and **Tilapia mossambica** or **Tilapia** (ஜிலேபிக் கெண்டை). **Tilapia mossambica** is usually found in the temple tanks of the District. It is a native of Africa and was introduced in India in 1952. The finger-lings such as Rohu, Maigal, Catla, Fringe-lipped carp, and **Labeo Calbasu**, multiply quickly. They are stocked every year in the tanks provincialised for fishery development and exploitation, of which there are 16 in Pudukkottai Taluk and 35 in Arantangi Taluk. The finger-lings of Catla, Rohu, Maigal, the Indian major carps (North Indian species) are collected in Cauvery delta.

The fishing rights in these 51 tanks are annually leased out to Fishermen Co-operative Societies. The rest of the tanks are vested with the Panchayat Union or the Panchayat concerned.

With the inclusion of the Arantangi taluk in Pudukkottai district the fishery of Pudukkottai district has acquired marine status. Along the district's 27.6 mile long coast line are sixteen fishermen villages of importance.

About 5,000 tons of marine fishes are landed annually in Pudukkottai district. The important landings consist chiefly of sharks (பால் சுறா, குரங்கு சுறா, கொம்பன் சுறா, மடவை சுறா) **Rays** (மணத்திருக்கை ஓட்டுத்திருக்கை) **Clupeids** (மொதக் கெண்டை, பால் கெண்டை, நெத்திலி, குடை, பொய் கெண்டை, தும்பிலி, ஆத்துப் பொருவா, தளரி), **Seer** (வஞ்சிரம்), **Eels** (சேகுமீன்) **Half beaks** (மொட்கை கோலா) **Thread fins** (துள்ளுக்கெண்டை) **Perches or Rock cods** (செங்கனி), **Jew Fishes** (கத்தளை, மண்டக்கண் கத்தளை, கப்பை கத்தளை) **Goat fishes** (சென்னவரை) **Ribbon fishes** (வாளை, சாவாளை), and **Pomfrets** (வெள்ளை வெளவால், கருப்பு வெளவால்).

Brackish water fishes like Pearl spot (சேத்துக் கெண்டை), **Chanes** (Milk fish) (பால் கெண்டை) and **Mulletts** also occur in the Arantangi coastal area.

Also found on the coast not infrequently is the Baches-de-mer called in Tamil, Addai or Attai (அட்டை), one of the edible Holothurians. This sea-slug is not consumed locally but is a prized export item. A description of its "treatment" before sale has been given in Edgar Thurston's *Notes on the Pearl and Chank Fisheries and Marine Fauna of the Gulf of Mannar* (1890): "One of the edible Holothurians (Trepangs or Baches-de-mer) is very abundant in the vicinity of Rameswaram, at both which places it is prepared for exportations for Penang and Singapore. The process of preparation, which is not an appetising one to watch, is as follows: "The Holothurians are collected as they lie in the mud at low water, and placed in a cauldron which is heated by a charcoal fire. After the boiling is repeated they are sundried and are arranged according to their size before shipment."

The Fisher Population.—The following table gives relevant statistical information in respect of the fishermen community in sixteen of the taluk's important fishing villages:

Serial number and name of the fishing village.	Adults who were 21 years as on 15th April 1972		Children below the age of 21 years as on 15th April 1972.	Total.
	Men.	Women.		
(1)	(2)	(3)	(4)	(5)
1 Kattumavadi . . .	61	65	104	230
2 Pirathabiraman- patnam.	78	86	121	285
3 Krishnagipatnam.	50	50	94	194
4 *Tirumangalapatnam.	6	8	12	26
5 Vadakku Amma- patnam.	132	135	213	480
6 *Sitharamanpatnam.	14	12	39	65
7 Ammapatnam . . .	232	232	390	845
8 Pudukudi North and South.	149	150	229	528

Supplied by the Department of fisheries.

Serial number and name of the fishing village.	Adults who were 21 years as on 15th April 1972.		Children below the age of 21 years as on 15th April 1972.	Total.
	Men.	Women.		
(1)	(2)	(3)	(4)	(5)
9 Ayipatnam ...	26	30	36	92
10 Kottapatnam ...	123	131	384	638
11 *Jagathapatnam ...	10	7	13	30
12 Gopalapatnam ...	94	84	116	294
13 Ayyampatnam ...	29	26	41	96
14 Pudupatnam ...	106	106	277	489
15 *Arasaneri ...	37	41	83	161
16 Muthukuda ...	152	160	354	666
	1,299	1,314	2,506	5,119

*(The asterisked villages are non-coastal, the rest coastal.)

Among these fishermen there are both Hindus and Muslims. The latter, belonging to the Marakayar and Rowthar sub-communities, are concentrated in Kottapattinam village. The Hindu fishermen here claim membership of the community of traditional seafarers, the Parvatharajakulam. The term (coastal fishermen) and Sembadavans (inland fishermen) spread out thinly along the State's coastline, this community has not enjoyed economic, social or political strength. In a recent publication,¹ C. Selvaraj has noted that most of the fishing families are in the income range of Rs. 100 to Rs. 300 and that their working life is short. There is a heavy masculine element in the fishing population of our coasts. This community has consequently, one of the highest dependence ratios in the country. Out of every ten members of the community, eight are dependent. It has figured regularly in the lists of backward classes drawn up by Government since 1903².

¹ Small Fisheries in Tamil Nadu (1975); Sangam Publisher, Madras.

² See Report the Backward Classes Commission, Tamil Nadu, 1971, Vol. II, pp. 63-66.

The divisions of the Parvatarajakulam call for a sociological study in origin and stratification. In a strict sense, only the Sembadavans are members of the Parvatarajakulam, the inland fishermen not being hereditary fishermen at all and belonging to the various Kallar denominations. It is significant that inter-marriage between the inland and coastal fisherfolk is practically non-existent. There is an admixture of Christians among the Sambadavans caused among other reasons by migrations to and from Ceylon. An accurate connection needs also to be established between the Parvatarajakulam community and the popular name for the coastal fishermen-Paratavan.

Mariamman is the chief deity worshipped by the Hindu fisher-community in Pudukkottai's coastline.

A panchayat system of settling disputes still operates among them, although its effectiveness is now open to question.

They live in clusters of houses, or *kuppams* by the sea. In the Ammapattinam fishing village the Department has formed a housing colony for the fishermen. One hundred and thirty houses have been built at a cost of Rs. 3,000 each. The houses are allotted to fishermen. Only one-sixth of the cost of the house is reimbursed by the fishermen-owner as a loan repayable without interest. There are plans under way for an expansion of the Ammapattinam colony and the raising of such colonies at Kottaiappattinam and Kattumavadi villages.

Most of the coastal fishermen have no subsidiary occupation, except poultry. It is said that until about a decade ago they engaged in coir-rope making. The womenfolk of the Hindu fishermen sell fish in the nearby markets in addition to their duties in the home. The Muslim women, however, do not leave their homes.

The setting out.—The coastal fishermen go out to sea throughout the year, particularly inclement weather alone confining them to the shores. The Palk Strait coastline not being particularly surf-beaten or disturbed, this contingency does not arise very frequently. The relatively calm temper of the sea here also explains the absence of catamarans in these parts. This raft of logs tied

together at each end is excellent for riding the rough wave¹. It is not however, needed on this quite seaboard. Mechanization has not been favoured by Pudukkottai's coastal fishermen, Only two mechanised boats had been gone in for in Arantangi taluk until July 1975. This is partially explained by the fact that the waters of this coast line are shallow and do not make for launch fishing.

The Arantangi fisherman use, instead, plank built boats or *dhonis* which glide on the calm waters or the Strait swiftly with the aid of sails. The fishermen leave the shores in the very early hours of the morning returning with their haul by noon. sometimes they start before dusk and return only in the morning after a whole night's vigil. They go generally in fives, threes or twos depending on the size of the craft.

A characteristic song sung by them at this time reflecting the insecurity of their profession as well as their lives goes:

தாயே படிபோடு சமுத்திரதேவியே!
உன்னை நம்பி நாங்கள் வந்தோம், உதவி செய் ஆண்டவனே
கடவுளே உன்னை நம்பி கடலேறி வந்தோமையா;
காற்றென்று பாராமல் கடலேறி வந்தோமையா.

Mother, food-giving sea goddess
Defying the gale that roars in mirth,
Have we come this day into the firth:
Give us our food, today, our alms
Trusting, believing, we row into your arms.

The advent of mechanised boats has considerably reduced the catch of these coastal fishermen. Some of them complain that the propellor-equipped launches *owned by few fishermen* in neighbouring districts some times come at a fast clip and tear the driftnets placed in the waters by them. The mechanised boats use, moreover, trawlnets which go deep down and "plough-up" the sea.

¹ Thurston in Vol. VI of the *castes and Tribes of Southern India* 1909. quotes from a letter written by a lady from Madras in 1843. "It is very curious to watch these catamarans putting out to sea. They get through the fiercest surf, sometimes dancing on the top of the waters, sometimes hidden under the waters; sometimes the man completely washed off his catmaran, and man floating one way and catamaran another, till they seem to catch each other again by magic".

Traditional fishermen on the coast here are afraid that a continuous use of trawlnets by mechanized boats will deplete the sea coasts fish-wealth. Until mechanized boats are available to the generality of coastal fishermen, an uneasy co-existence between launch owners and the traditional fishermen is inevitable.

The wooden crafts used are mostly the handiwork of Rowther carpenters and boat-makers¹. Others are now entering the business. In Ammapattinam, the boat-making yard is owned by a Christian

¹ For an excellent account of boat-making on the Madras coastline, see James Hornell's *The original and Ethnological Significance of Indian Boat Designs*; Memoir of the Asiatic Society of Bengal, 1920. A pertinent extract is given below :

“Palk Bay and Strait—Indian side: From Pamban in the south to Muthupet on the north, this region has a very distinctive type of fishing caned. It comes into the class of outrigger canoes, but instead of stability being obtained by a float boomed out on one side, the outrigger consists of a long and heavy plank laid athwart a dug-out canoe or a carvel built boat (both are employed), so that each end projects outboard a considerable distance on either side.

By loading the projecting section on the weather side with one, two, or three of the crew, a very efficient counterpoise is obtained.

Two main varieties exist, the southern form employed from Rameswaram in the south to Ammapattinam, halfway up the west side of the bay, and northern which is seen chiefly at Adirampattinam, Muthupet, and the neighbouring villages on the northern shore. The hulls of the former may either be dug-out canoes or, when large carvel built plank boats of the same general form. The rig is a square-heads lug, set on a main mast stepped a little forward of amidships. The outrigger in these consists of a long plank of heavy palmyra wood stayed only by a shroud on either side, led to the mast-head. In any but the finest weather the lee shroud is transferred to the weather side of the outrigger plank which then has two shrouds—one at the far end, the other some distance inwards. At the same time the lashing of the plane being loosened, it is run out some distance further on the weather side, giving a lop-sided appearance but increasing the counterpoise leverage. The shrouds give grip to the men stationed on the weather end of the plank.

In the northern varieties, for they differ considerably among themselves in detail, the hull is usually narrower and longer than their southern sisters, while the majority have a quaint three-masted rig that separates them decisively from any other Indian coast craft. Those of Muthupet, called *vala vathai* are the longer in this locality and instead of being dug-outs are narrow carvel built boats of canoe form. The average length is 43 feet, with a beam of 4 1/2 feet; depth 2 1/2 feet. The crew consists usually of five men.

Of the three masts the short foremast (13 1/2 feet long) is stepped right in the bows, the mainmast of 22 feet a little forward of amidships and the mizzen (14 1/2 feet) fairly far aft. Only the mainmast is furnished with stays, one on each side to the projecting end of the balance board and one aft. The sails are square-headed lugs. The balance board, *kadisu* about 17 feet in length is a plain plank as in the southern forms; according to the nature of the weather some of the crew, in emergency the whole available four, stand outboard on the weather section to prevent capsizing. As the bottom is rounded and without keel cwing to the shallowness of their muddy home river, leeway is counteracted by a useful-sized leeboard; with a good wind these long narrow boats under full sail are accounted the swiftest in these seas. The rudder is large and powerful, attached by pintle and gudgeon at the lower end and by a cuir lashing below the tiller.

fishermen under whom works a Rowthar. The timber used in the making of these boats is teak, mainly, and also (in making the ribs) wood from the Nim (*Azadin achta indica*) and partia (*Thespesia populnea*). The price of a boat depends upon the size, varying from Rs. 800 per craft to Rs. 5,000.

<i>Size of Dhoni</i>	<i>Capacity</i>	<i>Cost</i>
1. 15' \times 2½' \times 2'	Two Fishermen	Rs. 800 to Rs. 1,500
2. 25' \times 4' \times 3'	Four Fishermen	Rs. 1,500 to Rs. 3,500
3. 40' \times 5' \times 3'	Six Fishermen	Rs. 3,500 to Rs. 5,000

The location of good pawn grounds off Kottapattinam and Jegatapattinam in 1974 and 1975 and good facilities available for berthing mechanised boats in Jegatapattinam, the fishermen may go in for more mechanised boats. From 1975, the mechanised fishing boats are supplied by Tamil Nadu Fisheries Development Corporation.

Marketing.—The fish caught in Pudukkottai whether marine or inland, are consumed almost entirely inside the district. Fish caught in the coastal villages of Thanjavur district such as Adirampattinam, Mallipattinam are brought to towns in Pudukkottai district for sale. About sixty five per cent of the catch is consumed fresh, while about thirty per cent is either cured or sundried. Owing to their highly putrefying nature, fresh fish are consumed largely in the immediate neighbourhood of landing centres. The demand for fish in inland district and taluk headquarters is met to a large extent, by fish "cured" in the conventional manner viz., salting or sundrying. The natural demand, however is greater for fresh fish than for cured fish. Much of the fish sold as "Fresh" in the markets is often already in a state of putrefaction thanks to the lag between the point of catch and the point of sale.

Consumer preference as far as fish is concerned vary from place to place within the district. People along the coastline prefer only sea fish while those living in the interior go in generally for inland

fish. This is not a rigid principle since most people in the interior do not mind eating sea fish except perhaps the chettiers who stick to inland fish. It is clear that the preferences exercised are governed largely by availability and not affinity.

Of the classical methods of preserving the freshness of fish keeping them alive is regarded the best. Next is refrigeration. Then are, desiccation (salting with or without drying), antiseptic preservation with the aid of salt, smoke, boric acid, etc., and sterilization plus canning in that order.

An iceplant costing 1.54 lakhs rupees is to be set up at Manamkudi village. When installed, this plant is expected to produce two tons of ice every day. The ice will be sold at ten paise per kilo to marketers of fish from the fishing villages of Ammapattinam, Vadaku Ammapattinam, Kattumavadi, Kottai-pattinam, Krishnaji-pattinam and Pudukkudi. The fish and prawns from these villages, will, after being iced, be in a fitter condition for their transport to the railheads at Arantangi and Pudukkottai enroute distant markets, apart from the interior towns of Pudukkottai and neighbouring districts.

The Department of Fisheries has established an Inshore Fishing Station in Mallipattinam during the year 1975. It undertakes exploratory fishing operations off the east of Pattukkottai and Arantangi Coastal belts upto 20 fathoms water lile. The station is provided with two mechanised fishing boats to conduct experimental fishing operations in about 465 square kilometres in the sea. The object is to ascertain new and rich fishing grounds. It will also help to ascertain the season at fluctuations of fish catches in a particular area. It may also be possible to introduce suitable type of fishing to be conducted. The results of fishing experiments will be given publicity among local fishermen of this area so that they can approach new and rich fishing grounds and increase their catches.

It is also proposed to provide a landing jetty at Kodiakkarai in Thanjavur district.

The Future.—While much is being done by the Department to improve the fisher community's quality of life, many waves remain to be ridden. The co-operative movement can play an increasing part in its service to small fishermen, by a diversification and extension of its activities to cover the making of *dhonis* and nets as also the storage, transport and marketing of catch. Housing, medical and sanitation facilities and very important—the provision of link roads to fishing hamlets are other areas that call for planning and outlay. The State Planning Commission's perspective plan for fisheries envisages an investment of Rs. 400 lakhs for a co-ordinated programme in this direction which, if implemented, will assist the sea-godess in answering the Pudukkottai fisherman's prayer.



CHAPTER V—INDUSTRIES.

The only 'industrial' tradition in Pudukkottai has been handicrafts. Silk-weaving, dyeing, zari, perfumery, the manufacture of musical instruments, of bangles from bangle-earth, stone-work, wood-carving, palm-leaf handiwork, blanket-weaving, have been practiced in the area since decades. What is the state of these handicrafts today ?

A 13th century Pandya epigraph in Tiruvarangulam speaks of smitheries and a document written on palm-leaf in the year 1813 mentions similar activities in Perungalur and a couple of other subjects. High-grade magnetic ore and certain other minerals such as mica have been known to exist in Pudukkottai. The Darbar tried on several occasions to investigate the commercial possibilities of these deposits, but without success.

Where does the Pudukkottai district stand today in the industrial map of Tamil Nadu ? What are its industrial prospects ?

Pudukkottai's rural population has traditionally supplemented its farm income with earnings from the diligent production of handicraft goods. But the old vibrant spirit does not inform the district's cottage industries as it once did.

Handicrafts.

The all India Handicrafts Board and the Tamil Nadu Handicrafts Development Corporation Limited, conducted a joint survey of the handicrafts of the Pudukkottai District, for the *Pudukkottai District Gazetteer*. The following pages contain *inter alia* some of their findings:—

Weaving.—The *Statistical Account of Pudukkottai* prepared on palm leaf in 1813 speaks of 30 silk looms in Tiruvappur, a suburb of Pudukkottai town.

Pharo's *Gazetteer of Southern India* (1855) describes Tiruvappur as an emporium with "numerous bazaars in which cloths of various qualities and the best in the province" were sold. Hemingway, in his *Gazetteer of the Trichinopoly District* (1907), says that the "silk and cotton cloths of Tiruvappur have a considerable reputation" and that the "scarlet vegetable dye used there is specially well-known." These used to be made by some hundred families of Patnuls or Saurashtris, whose ancestors are believed to have come to centres in the South such as Madurai and Thanjavur from Kathiawar in the west coast, owing to the oppression of Muslim invaders, at the time of the Nayaks. But by the mid-1940s the making of these coloured 'sayaveshtis' and tartans for the use of the local muslim population and Burmese nationals had begun to decline.

At present, according to the Handloom Census, 1973, the craft is practised by about 3,000 weavers in the district, which has about 1,299 private looms. They mainly produce 60 x 40 and 100 x 80 art silk saris. Before 1970 there were three Weavers' Co-operative Societies in the Pudukkottai area at Animalam, Rayavaram, and Tiruvappur. All these have since gone into liquidation due to 'dormancy'.

In Tiruvappur, their old stronghold, about 300 cotton weavers produce annually cotton saris worth about Rs. 15,00,000 in value which are mentioned both locally and in Tamil Nadu's bigger cities and towns. The wages earned amount to about Rs. 3 to Rs. 5 a day. Some 20 families of silk-weavers continue the tradition of their ancestors in Tiruvappur, their annual production being about Rs. 1.5 lakhs.

In Annavasal Panchayat Union, cotton weaving is done by about 60 artisans in Parambur and about 25 artisans in Iluppur. Their raw materials—dyed yarn and art silk—are supplied by master weavers' and the production is disposed of by them either locally or in larger markets outside the district. Their annual production is worth about Rs. 50,000, the average earning of each artisan being about Rs. 4 per day.

About 90 Saurashtra families, which settled generations ago at Arantangi, yet practice the old art of silk-weaving, producing saris, mostly. The price of a silk sari varies from Rs. 200 to

Rs. 400 depending on the quality and the use of zari thread. They have about 50 looms between them and work on a 'piece-rate' basis ranging from Rs. 5 to Rs. 8 per day. Their total annual production is about Rs. 3,00,000.

Cotton weaving is also practised in Seniappatti, the Virali-malai Panchayat Union, where about 20 weavers produce 'Uraiyur'-type saris valued at Rs. 20 to Rs. 25 each.

Terracotta.—Large-sized terracotta¹ horses and figures of village deities are found in almost every village of Pudukkottai district. They are conspicuously located on the boundaries of villages. The making of terracotta horses and figures has been in vogue in the Tamil land for centuries. The images, usually installed in 'Ayyanar temples,' are believed to protect the subjects of the village from evil-spirits and the wrath of nature.

These giant structures arrest the attention of the visitor as he motors through the roads in the countryside. Made of burnt clay and often painted in bright colours, the images are generally found in clusters. The figures depict the 'deva' and 'asura' ('pacific' and 'terrible') aspects of the 'grama-devatais'. After harvests, these deities are worshipped thankfully. The male figures sport big whiskers and hold swords. Since these watch and ward deities are supposed to be more active in the nights they have a 'vahana' (vehicle) to go about. Hence the complementary presence of horses, elephants and dogs. These deities are mostly exposed to the open with no built-in protection—a feature notable by itself. Ayyanars are also found on riversides or by tanks and are supposed to prevent breaches.

The deities bear a variety of names such as Madurai Veeran, Muneesvaran, Kuttichithan, Samban, Lada Sanyasi, Chinnannan, Periannan, Karuppanaswamy, Muniandi, Sangili Karuppan Pechaiamman. Whenever the people of a village suffer due to some particular epidemic such as measles or cholera they take a vow that if by the grace of God they are rid of the pestilence, they will offer miniature earthen models of a horse, cow, bull, dog to the Ayyanar temple. A child-image, popularly called

¹ The word is Italian and means, literally, baked earth,

mathalai is also offered as a thanks-giving by couples that have had a child after much prayer, or whose child has survived a major illness. Among the female deities the most popular is **Mariamman**, supposed to protect people from small-pox.

Red or common clay ('**Chemman** or **Kaliman**' in Tamil) from the local water tanks, sand and fuel (mostly waste of twigs, consumable materials like cow dung, straw) are the basic raw materials, for the **terrecotta** images. These are available almost free in the potters.

Clay when mixed with an appropriate quantity of water becomes plastic, in which state it lends itself to limitless shaping. The addition of a small quantity of sand makes the mixture, known technically as the 'body', strong and easy for drying without cracks. Shaping is done by the process of 'throwing' on the potters wheel and 'beating', (as in water-pots and cooking vessels); and by modelling or by pressing in clay/plaster moulds (in the case of figures).

The shaped articles (which are known as 'greenware') are sun-dried completely and are piled or stacked on the ground by imbedding them with layer of fuel and finally covering them with pieces of 'brokenware' sealed off with mud and cow-dung. A fire is lit at the bottom which slowly spreads to the top and in the process bakes the wares. The heat finally developed is about 750° to 800° C. (low red heat) and takes about 6 to 8 hours. The baked articles are unloaded, after they cool. The wares by now turn red colour and are known as **biscuit-ware** or **terracotta**.

The 'biscuit wares' are permanently hard but porous. The figures, therefore, can be decorated with various colours—white by '**ohunam**', deep red by '**kavi**' (red ochre) yellow by yellow ochre or by vegetable dyes. While utility articles are quite cheap (water pots costing only a couple of rupees) figures are quite expensive—a 4 feet-horse costing about Rs. 60.

The pieces are sold locally in '**sandais**' or bartered and supplied against orders. The occupation is seasonal and its practitioner's income is supplemented by agricultural operations. The average earning of a common potter from his clay-products is about Rs. 2-60 a day and that of an **Ayyanar** about Rs. 3 to Rs. 5 a day.

The important terracotta and pottery centres in the district are Annavasal, Iluppur, Mangudi, Satyamangalam, Tiruvengaiwasal (all in Annavasal Panchayat Union) ; Kuthadivayal (Arantangi Panchayat Union) ; Malaiyur and Narangipatti (Avadaiyarkovij Panchayat Union) ; Kallampatti and Sembudi (Kunrandarkovij Panchayat Union); Poovarasakudi and Kosalakudi (Tiruvarangulam Panchayat Union).

The terracotta and pottery makers or 'kuyavars' as they are locally called, are extremely poor. While the 'Bankura' horse figure from West Bengal has now become deservedly famous in India and abroad on account of the attention given to it by cottage industries emporia of the Government of India, the terracotta figures made in Tamil Nadu's district like Pudukkottai are yet to receive national limelight.

Palm Leaf.—A Government Training Centre at Pudukkottai imparts training to individuals drawn from all communities in the making of baskets, bowls boxes and trays with the slit leaves of the palm tree. The raw-material required, the tender palm leaf is available in abundance at about 10 to 15 paise each. The tools required are equally simple : a knife and scraper. Recently, a palm-leaf 'sizing' tool has been devised and introduced by the Centre to obtain uniform slices that make for a better finish to the products. The slices that are split from the leaves are woven on one's hand without a loom, plaited and/or knotted around a mould to get the desired shape. The leaves can be dyed in different shades. Mirattunilai, Nachandupatti, Valaimangalam are some of the centres where the craft is conducted, apart from Pudukkottai town, where some 150 trained artisans earn a meagre wage of about Rs. 1.50 to Rs. 2 a day.

Workers belonging to the Harijan community, as also 'Arivayar' chettians, Kuruvars (Vedavars) make of date-palm leaf. The leaf known locally as 'inje', which is obtained almost free, is the only raw material required. The split leaves are handwoven into strips 6 to 8 inches in width and then are joined together to make mats of various sizes. These mats, which are very cheap, are used for wrapping jaggery, packing and also as a rough covering for floor. Date palm stems also used for the manufacture of baskets required for agricultural operations.

The craft is practised as a subsidiary occupation in villages of Poonamaravathi Panchayat Union such as Kallampatti (20 families); Sembudi (35 families); Alavayal (50 families). The presenting of a set of palm-leaf baskets and bed-mats to a Chettiar bride in these parts is said to be obligatory at the time of her marriage. In the village of Ariyandi (Karambakkudi Panchayat Union), about 22 Kuruvar families make baskets from the date palm-stem, earning the unsatisfactory average wage of Rs. 3 a day.

Cane Work.—This is a new craft introduced to the district by the Department of Industries of the Government of Tamil Nadu, which trains men and women from all communities in the craft at the Government Training Centre, Pudukkottai. The centre has since been transferred to the Tamil Nadu Handicrafts Development Corporation Limited. Cane is imported into the district from Shenkottah and Madras at rates varying from eighty paise to Rs. 2.50. The cane's outer 'skin' is used, the pith inside being rejected. The Centre has trained workers to make chairs, tea-poys, trays, stools and the like. A garden chair made at the Centre costs Rs. 45. The market is both local, and in towns and cities outside the district. The average earning of an artisan is about Rs. 3 to Rs. 5 a day, the talented craftsman earning as much as Rs. 15 a day.

Aloe Fibre.—Aloe, a plant with erectile spikes locally known as 'kathalai', is found growing on field-bunds. Its leaves which are almost a foot long are cut while still green, soaked in water, then beaten up with wooden hammers to loosen the fleshy material so as to obtain a fibre. The fibre is removed by scraping the leaf with a metal comb. The fibres are twisted first with hanks of the proper count and then ropes are produced on a simple twisting device. Aloe-strings are marketed locally. The average daily earning of an aloe-fibre worker is about Rs. 2.50.

Themnavur in the Kunrandarkovil Panchayat Union is a centre for aloe-fibre, engaging about twelve Muthuraja/Valayar families.

Korai Grass.—Korai grass is a weed that grows wild on the banks of irrigation channels and can be about two to three feet long. It has long been one of the materials of which mats are made.

The korai mat-weaver purchases the grass in bundles (costing Rs. 6 to Rs. 8) which is enough for the weaving of above five mats of the size 6 feet by 3 feet. The traditional korai weaver uses a primitive loom. The warp is of cotton yarn, while the weft is made of an individual stick of grass. An improved double-mat loom designed by the Regional Design and Technical Development Centre of the All India Handicrafts Board, Bangalore, claims not only improved productivity but a reduction in the back-breaking nature of the craft.

Amanapatti (20 families) ; Mullankurichi (2 families); Pallavarayanpatti (3 families) and Theethanviduthi (40 families)—all in the Avadaiyarkoil Panchayat Union are korai mat-weaving centres. In the last named village there is a Mat-Weavers Co-operative Society and a common workshop built by the Government.

The mats made here cannot be compared with the celebrated 'pathamadai' mats for fineness of texture. But their qualities are strength and durability. They are marketed both within and outside the district. The annual production is about Rs. 50,000, the average earning of a mat weaver being Rs. 2 a day.

Bamboo Work.—This is an age-old craft, the bamboo craftsman forming part of the traditional village community. It is practised by the denotified tribe of Veduvars.

Green Bamboo, which is readily available at about Rs. 5 per bamboo, is the raw material. Simple hand-tools, which although primitive in nature are quite efficient, are used. They cost about Rs. 50 per set.

The bamboo is split length-wise by a knife, and both splinters and slices are obtained. The slices are woven around the splinters and the whole is then placed according to the design and object required. Cheap colours are used to dye the slices.

Mats and baskets of various shapes and sizes required by agriculturists are produced. Inexpensive, they are in good demand by the agricultural community and are usually disposed of by barter. The average earning of craftsman is about Rs. 2.50 per day.

Athipallam in the Viralimalai Panchayat Union is a centre for bamboo work, about ten families being engaged in the craft. Their annual production is about Rs. 10,000, individual workers earning about Rs. 2 a day.

Stone-Carving.—This art is generally practised by male members of the Vishwakarma community. It is an important traditional craft, handed down from father to son over many generations.

Locally mined granite is the raw material. It costs about Rs. 6 per c.ft. The selection of the quality, grain and size of the stone is extremely important. The sculptors here, whether consciously or unconsciously, follow the instructions contained in the *Silpasashtra* for the work on hand. The figures are carved out of the stone by chiselling them with steel tools and hammers a set of which costs Rs. 700.

The pieces made are idols of gods and goddesses, temple architectural requirements. This vocation is thus almost wholly temple-based. The artisan generally works against orders.

A finely sculptured piece, some 2 feet in height, can cost about Rs. 200 and take about 3 weeks to produce.

The average earning of a master-artist is about Rs. 12 per day.

Tirugokarnam, on the outskirts of Pudukkottai town, has a few stone craftsmen. They earn about Rs. 10 a day, carving stone utensils and temple idols, the annual value of their products being about Rs. 20,000.

Wood-Carving.—Wood-carving in Pudukkottai district is restricted to 'vahanam' making for temples. These include the bull, lion, horse. There are only 3 or 4 traditional Vishwakarmas who are engaged in this work. Naturally seasoned and mature wood, generally from the *Po. tia* tree, is used. The tools are locally made. Simple carving chisels of four feet high vahana can cost about Rs. 900.

Silattur and Rayavaram are notable centres.

Sudai Work:—This is a modelling art practised by male members of the Vishwakarma community.

The raw materials used are ordinary red-brick, stone kankars and lime-mortar.

The required figures are modelled with the above materials using lime-mortar to give the necessary finish of the details of sculptural work. The figures are painted with modern materials.

Here again, the entire art is completely temple-based and as such work is undertaken against orders. Since the art object cannot be transported, there is no possibility of their commercial marketing.

The artist earns about Rs. 10 per day.

An exquisite master-piece of Sudai work is evidenced at the temple of Madurai Veeran in Silattur. There are only one or two master craftsmen who now practise this craft. A wage of Rs. 12 per day is earned on an average by them.

Jewellery.—Until about fifty years ago, Pudukkottai town was a sizable bullion market in which gold and silver bars of different weights were sold. Of some seventeen reputed shops dealing then in gold and silver jewellery only three now remain. The Gold Control Order of 1962 affected the craft rather severely. The Government has advanced loans to some 50 individual displaced jewellers. About 25 persons from the community have also been given housesites of a reasonable size (5 cents) per family.

A Vishwakarma Sangam of jewellers registered in 1920, looks after the interest of some 300 members of the Sangam. About 250 workers are at present engaged in the manufacture of gold and silver jewellery in 120 pattarais or working places in the town.

The cutting and polishing of synthetic gems is a craft pursued in Annavasal by about forty craftsmen of all communities. Their annual production is about Rs. 1,80,000. The average daily earning of a synthetic gem cutter is about Rs. 6.

The Pudukkottai district would hardly find place in a handicraft map of South India today. Looking at the fine stone carvings at Kodumbalur, Narttamalai, and Madattukkovil, and the much more recent wood work in the villages of Chettinad nearby, one cannot but be amazed that there should be no one today to even approximate the old workmen. The occasional stone-cutters and wood-cutters, impoverished basket-weavers and rope-twisters constitute the district's artisan population. And yet, until not very long ago, Pudukkottai boasted of a vibrant tradition in handicrafts,

Descendants of Kurumbar, originally a pastoral people owning land and flocks of sheep, spun wool and wove cumblies (blankets) as subsidiary occupations until as recently as 1938. The *Manual of the Pudukkottai State* written in that year tells us that Sellukkudai and Melur had 30 to 40 Kurumbar families making cumblies. On an average, each Kurumbar's house in villages such as these two owned 100 to 200 sheep. In years of normal rainfall, the Kurumbar got two shearings of wool from their flocks, the fleece of ten to fifteen sheep being sufficient for one cumby of $\frac{1}{2}$ lb. measuring 6 cubits. The men did the shearing, while the women cleamed the wool, carded it by means of a small handbow, and spun the yarn on a spindle. They wove the cumby in two halves and then stitched them together to make one cumby. Most of these were of grey wool and sometimes pure black or pure white. This ancient and for a hot area like Pudukkottai, somewhat curious craft, is now totally extinct.

We are also informed by records that Pudukkottai enjoyed until some fifty years ago a reputation for perfumery, fine varieties of which were made under the patronage of some local brahmins and muslims. Scented sticks made in Pudukkottai and garlands made of scented wafers (billais) were sold both within and outside the then Pudukkottai State. Ornamented figures of birds glistening with beads and lace could sometimes fetch as much as Rs. 50 each.

Vaittur, in Kulattur taluk, was a centre of a thriving bangle industry. The bangles used to be made from bangle earth collected locally.

Musical instruments such as the Vina, Tambura and Mridanga were made in the Pudukkottai State and had earned a name for their quality and finish. Embroidery was carried on here by muslim experts and was noted for its decorations in gilt thread (Thuyya) tinsel discs (Jigina), and metallic tubes (Poorni) which were stitched on to silk and velvet in various designs.

But like the Kurumbar's cumby, the perfume, the bangle, the musical instruments and zari designing, are all now things of the past. If an economic improvement in the status of the population had led to the disappearance of these crafts, the only regret need have been over loss of certain aesthetic crafts. But that is not what has happened. The crafts have gone, but not the need for the supplementary incomes which these crafts provided. The need persists and in fact, is felt more keenly than ever.

Khadi and Village Industries.—In order to attain self-sufficiency in cloth the Government formulated in 1946 an 'Intensive Khadi Scheme' and in 1949 an 'Extensive Khadi Scheme'. Under the Intensive Khadi Scheme which was introduced in a few centres it aimed at providing atleast the charkha for each family by the supply at cost price of charkhas and carding and slivering equipments. In the case of the poor payment in instalments was permitted. The spinners were encouraged to grow their own cotton and to gin, card and sliver it themselves, but, where they could not grow cotton, it was supplied to them by the authorities. A subsidy was also given to the spinners to make use of the cloth spun out of their yarn. Under the extensive Khadi Scheme which was introduced into many firkas, it was aimed to supply at concessional rates, where necessary 1,000 charkhas a year in each of the firkas. Arrangements were also made under this scheme for supplying cotton and ginning and carding equipments and for giving subsidies to spinners who used cloth produced by their own yarn. The idea was that the Extensive Khadi Scheme should pave the way gradually for the Intensive Khadi Scheme, the entire Khadi Scheme being intended to provide an ideal subsidiary occupation to the agriculturists in the off-season. Having been included in the list of the Post-War Development Schemes, it became eligible for financial assistance from the Government of India, and for the first three years it received such financial assistance to the extent of Rs. 11.85 lakhs. The All India Spinners Association guided the activities of the scheme till 1950, when it withdrew its men. The Government then appointed their own staff. Considering the importance of the scheme, the Tamil Nadu Government created an autonomous body in this State. The Tamil Nadu Khadi and Village Industries Board came into existence on 1st April 1960.

Previously there were some stray spinning activities in the Pudukkottai area organised by non-official agencies.

At present there are three 'Khadi Kraft' centres in this area, at Pudukkottai, Alangudi and Arantangi. There is one Khadi sub-centre and one Rural textile centre stationed at Pudukkottai. The following village industries units are organised in this District at the places mentioned below :—

Match Unit	:	1. Rayavaram.
		2. Avadaiyarkovil.
Palmgur Co-operatives	:	15

Handpounding Co-operative

Society.	: 1
Pottery Societies	: 2
Carpentry and Blacksmithy Unit.	1 Under the control of Pan-chayat Union at Arantangi-

The following are the sales figures in this area :

<i>Year.</i>	<i>Khadi.</i>	<i>Village Industries.</i>
1972-'73	4.17 lakhs	37,000
1973-'74	2.07 lakhs	57,000
1974-'75	3.13 lakhs	73,000

INDUSTRIALISATION.

Present Occupations.—According to the Director of Industries and Commerce,¹ the district had, in 1975, a total of 332 registered industrial units. An analysis of these units reveals that the district has some 350 identifiable manufacturing units. Of these a large number are concomitants of agriculture : 90 units making agricultural implements, six making door hinges, bullock and horse shoes, four making dairy equipment. These units are, significantly, concentrated in Arantangi taluk which, as a former part of the district of Thanjavur, has known a particularly active agricultural tradition. The remainder serve a mixed population of town and country customers. The traditional Pudukkottai area (the three old taluks of Kulattur, Alangudi and Tirumayam) hold the concentrations of units manufacturing household goods. The break-up is as follows—

Registered Industrial Units in Pudukkottai District.

<i>Serial number and Manufacturing Units.</i>	<i>Total Units.</i>	<i>Taluk.</i>				
		<i>Pudukkottai.</i>	<i>Tirumayam.</i>	<i>Arantangi.</i>	<i>Alangudi.</i>	<i>Kulattur</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Non-agricultural wood ..	77	4	5	68	..	..
2. Printing	10	8	..	1	1	..
3. Steel Works	9	7	1	..	..	1
4 Soap Manufacturing ..	15	10	1	4	..	..
5. Confectionaries	4	3	1	..	..	..
6. Wax Works	12	4	2	1	..	5
7. Agricultural Implements	90	7	2	59	1	21
8. Safety Matches	7	2	2	1	..	2
9. Cement Works (pipes, mosaics, etc.)	22	5	9	1	3	4

¹ Report for the *Pudukkottai District Gazetteer* dated 10-6-1975. A single Registered union can manufacture more than one commodity. Figures in the Table are commodity-wise.

Serial number and Manu- facturing Units.	Total Units.	Taluk.				
		Puduk- kottai.	Tiru- mayam	Aran- tangl.	Alan- gudi.	Kulag- tur.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
10. Household Articles (Brass, stainless steel, aluminium etc., vessels)	33	23	7	1	1	1
11. Gem-cutting	9	2	..	..	..	7
12. Tyre-Retreading	5	5	..	..	..	..
13. Betel nut, Tobacco	5	4	1	..	..	..
14. Automobile (Repairs, body building, etc.)	22	22	..	..	..	..
15. Paper, board, etc., manu- facturing	2	2	..	..	..	..
16. Door, Hinges, Horse Shoes Bullock Shoes, etc.	6	2	..	..	..	4
17. Readymade Garments	4	1	1	2	..	..
18. Steel trunks, etc.	3	3	..	..	..	..
19. Plastic, Polythene, etc., articles	5	5	..	..	..	..
20. Dairy and Chemical Equip- ments,	4	1	3	..	..	..
21. Coir-making	1	..	..	..	1	..
22. Sugar (Khandasari)	1	..	..	..	..	..
23. Paddy Hulling	1	..	..	..	..	..
24. Vermicelly	1	..	1	..	..	..
25. Ice Factories	2	1	1	..	..	..
26. Calcium Glucorate	1	1	..	..	..	..
Total	351	122	37	138	7	47

The limited extent of industrialisation on the district's industrial life becomes obvious from the above data.

The average consumption of electricity per month for industrial purposes in the district is 5,83,613 units and represents 32.99 per cent of the total monthly consumption as against 34.05 per cent consumed for agricultural purposes. (Please see Chapter IV Agriculture and Irrigation.)

The Declaration of Backwardness.—Pudukkottai's buffer character led, in history, to its being left out of the more climactic geopolitical events of the region. Likewise, in recent years, Pudukkottai's having been a small revenue division on the extremities of Tiruchirappalli district and outside the borders of Thanjavur and Ramanathapuram districts, kept it away from the centres of significant agro-industrial endeavours. While Thanjavur has seen a spurt in agroengineering activities, Tiruchirappalli an acceleration of industrial activity following the setting-up of the B.H.E.L. complex, and while Ramanathapuram has raced ahead with technological education in centres such as Karaikkudi, Pudukkottai has been an area of relative inactivity. Potential entrepreneurs and capital have neither stayed in nor come into the Pudukkottai area, which has been an economic and industrial backwater.

With the according to it of district status, however, the outlook for Pudukkottai is now different. A series of indications point to Pudukkottai's emerging from its economic and industrial quietus. The first of these is the formal declaration of the district as 'backward'.

That the formal declaration of one's village or district as 'backward' can be a matter of satisfaction appears unbelievable. And yet, since the label has betokened the inauguration of a programme of assistance, it has been welcomed. The sentiments of those interested in Pudukkottai's industrialization were, therefore, summed-up in the following observation of the *Indian Express*, Madras, in its issue of April 19th, 1975. "The fifteen month-old Pudukkottai district, the 15th district in Tamil Nadu, can look forward to a new era of progress in industrialisation with the recent decision of the Planning Commission of the Government of India to identify the district as economically and industrially a most backward one." Explaining the district's many-faceted backwardness, the news item went on to describe the implications of the decision.

"Concessions will be offered by the Centre and the State to those who start industries in this backward area. A moratorium of five years will be offered for the payment of the first instalment of the loan. Instead of 10 to 12 years of annual instalments entrepreneurs will be allowed 15 to 20 years to repay the loans,

Routine service charges will be reduced by 50 per cent. A 15 per cent concession in power tariff, apart from providing power connections on a priority basis, will also be offered. The Centre will offer 15 per cent of the total investment as a grant. A 15 per cent rebate on the raw materials will also be given."

SIDCO.

The Tamil Nadu Small Industries Development Corporation Limited set up in October, 1970, by the Government of Tamil Nadu to assist and develop small scale industries in the State, has so far¹ assisted 13 entrepreneurs in Pudukkottai district for the purchase of machinery required by them under hire purchase schemes, to the extent of Rs. 7.63 lakhs. Of these units, four relate to light mechanical engineering (including the manufacture of agricultural implements) two to stone crushing, two to the manufacture of bullock and horse shoenaills including panel pins, two to printing, one to tyre retreading, one unit to the setting up of a saw mill and one unit to insecticides. All the units have commenced regular production.

SIDCO is also implementing the Central Outright Grant or Subsidy Scheme of the Government of India, as far as it relates to Small Scale Industries, as an agent of the State Government. Under the Scheme any industrial unit set up in any one of the 27 taluks spread over 5 backward districts in the State is eligible for a Central Outright Grant or Subsidy equivalent to 10 per cent of the eligible fixed assets. This rate has been increased to 15 per cent with effect from 1-3-1973. In Pudukkottai District four taluks, viz. Pudukkottai, Tirumayam, Alangudi and Kulathur have been included in the list of taluks eligible for subsidy. Eleven units have been granted subsidy through SIDCO. Of these eleven units, five units relate to light mechanical engineering, one unit to chemical industry, two to printing, two to plastic and leather tanning, and one to stone crushing.

Pudukkottai and B.H.E.L.—Apart from the schemes mentioned above SIDCO has finalised proposals to establish an industrial estate at Mathur in Kulathur Taluk which will be an ancillary to Bharat Heavy Electricals Limited, Tiruchirappalli. The Collector of Pudukkottai has placed some over 20 acres at Mathur at the

¹ April 1975.

disposal of SIDCO for setting up the estate. To start with there will be 10 units with provision to expand as the demand develops.

The Small Industries Service Institute of the Government of India, in its *Report on the Techno-Economic Survey of Pudukkottai District* (March, 1975) says: "The High Pressure Boiler Plant of BHEL at Tiruchirappalli was set up in 1965 with a rated output of 13,000 tonnes of finished boiler components, equal to a power generating capacity of 750 MW per annum. From an output of 3,230 tonnes in 1966-67, production shot up to 34,500 tonnes in 1972-73 and to 48,500 tonnes in 1973-74 (budgeted). To meet the ever-increasing power needs of the country, BHEL has been permitted to expand its capacity to 2,500 MW in the next three years. When this is accomplished, out-put of boiler equipment will reach 90,000 tonnes per annum.

BHEL has been a pioneer in encouraging ancillary units and has an Ancillary Industrial Estate adjacent to it, with 10 units catering to the requirements of BHEL as full-fledged ancillary units. Eighteen more units are in advanced stages of completion. Further, in the Developed Plots Estate adjoining BHEL, 80 developed plots have been allotted to entrepreneurs.

Besides the full-fledged ancillary units, BHEL also farms out orders to over 100 firms (large and small) mostly in and around Tiruchirappalli. But there are also a few units located at far-off places like Hyderabad, Poona, Bombay, Bangalore, Chandigarh and Allahabad as well as within the State such as Madras, Coimbatore, etc., which cater to the requirements of BHEL.

Presently, most of the work sub-contracted by BHEL relates to fabrication and machining. It is understood that the ancillary requirements of BHEL will increase by about 30 per cent over the present level, under the expansion programme in the Fifth Five Year Plan period. When the output level of 90,000 tonnes per annum is attained, the quantity of fabrication work sub-contracted will reach a figure of 35,000 to 40,000 tonnes per annum. Scope, therefore, exists for small scale units to cater to the increasing requirements of BHEL in regard to fabrication and machining as well as other items, as enumerated in the ensuing paragraphs.

Presently, BHEL, sub-contracts orders for fabrication and machining worth Rs. 143.50 lakhs to small scale and large scale units. In the next 3 years, this is likely to go up to 30 per cent under the expansion programme as indicated earlier.

BHEL requires several non-engineering items, the particulars of which are given below. It may be observed that several of them are obtained from outside the State and in some cases, from far-off places. This indicates that there is scope for units in Pudukkottai district also to compete with the other units and secure orders for supplying them to BHEL also.

		<i>Requirements per annum. (Rs.)</i>	<i>Source of present supply.</i>
<i>A. Electrical Accessories.</i>			
1	Contractors	1,00,000	Madras/Kerala.
2	Overload relays	50,000	Bombay/Madras.
3	Carbon brushes	1,00,000	Madras.
4	HRC Switch fuse units	50,000	Madras (English Electric Co.)
5	Switches, etc. (bakelite elec. accessories)	75,000	Madras/Tiruchi.
6	Black insulation tapes	30,000	Madras (Dealers) (Mfrs.: Johnson and Johnson).
7	Fus distribution boards (wooden)	10,000	Tiruchi.
	D.O. L. Starters (including push buttons.)	50,000	Madras (Manufacturers in Tamil Nadu).

B. Other Items.

1	Paper envelopes (all types)	Rs. 25,000	Tiruchi/Madurai/Madras
2	Polythene bags	Rs. 5,000	Madras/Coimbatore.
3	Plastic components (end caps)	Rs. 10,000	Madras/Coimbatore.
4	Polythene paper (alkathene films) HD and LD 175 micron (used for lining inside packing boxes).	Rs. 1,00,000	ICI Calcutta.
5	Liquid detergents, soft soaps, etc.	50 Kgs/day	Established brands from dealers.
6	Cleansing powder (Vim)	Rs. 36,000 (1,000 tins per month).	Established brands.

	<i>Requirement per annum. (Rs.)</i>	<i>Source of present supply.</i>
<i>A. Electrical Accessories.</i>		
7 Bitumen impregnated Hessian ..	Rs 75,000	Shalimar, Calcutta Lloyds Insulation etc.
8 Wood Wool	Rs 10,000	Mysore/Coimbatore.
9 Wood screws/wire nails	Rs 50,000	Tiruchi/Pudukkottai.
10 Painting brushes	Rs 50,000	Outside Tamil Nadu
11 Safety equipment (welding head shields (100 pieces fibreglass) moulded welding hand shields).	per annum. Rs. 75 to Rs. 100 each.	Indian Oxygen.
12 Goggles (bakelite)	Same Number as above. Rs. 12 to Rs. 15 each.	Bombay.

Medium-to-Large Plants.—Existing Industries.—There are three medium scale units in the district, namely: ..

i. M/s. Cauvery Spinning and Weaving Mills, Vellanoor, near Pudukkottai Town.

2. M/s. Pudukkottai Textiles Limited, Namanasamudram, Pudukkottai.

3. M/s. Nadiammal Textiles Limited, Arantangi.

M/s. Sundaram Industries (Private) Limited, Pudukkottai are engaged in automobile servicing, tyre retreading, etc. In addition to the above mentioned large scale units, two private sector units, viz. M/s., Ramachandra Chemicals Private Limited assisted by SIPCOT and M/s. Universal Bicycle Accessories assisted by SIDCO both at Keeranoor, Kulattur taluk are also being set up. The former, with a capital investment of Rupees one crore has already commenced production of fatty acids and glycerine from non-edible oils such as neem oil, rice bran oil, etc. The production capacity of this unit is about 12 tonnes per month. By processing 12 tonnes of oil per month, about 1 to 1½ tonnes of glycerine could be obtained.

Small scale units in the district which are engaged in the manufacture of soap from non-edible oils may take advantage of the availability of fatty acids produced by this unit locally. Further, crushing non-edible oil seeds like neem seeds with the help of mechanical ghanis may be more advantageous to this large scale unit than purchasing their oil from outside. The neem and other non-edible oil seeds are available locally. If necessary, they could be supplemented by supplies from outside. The unit may, therefore, consider the desirability of setting up power ghanis to crush neem and other non-edible oil seeds as an adjunct to their plant. It is understood that this unit is purchasing non-edible oils from outside, at Madras. By undertaking to get the oil crushed locally in the power ghanis, not only will the unit be enabled to have constant and regular flows of oil but also to save and preserve the glycerine, by separating it from the fatty acid. Much of the glycerine, a highly priced material, is being wasted now by the indigenous washing soap units, utilising non-edible oil as such, instead of fatty acid. They do not use glycerine in the production of washing soap. The glycerine thus saved and separated from fatty acid could be put to use in the manufacture of toilet soap and other preparations. The collection of seeds and their regular supplies may, however, have to be arranged.

Another unit, M/s. Universal Bicycle Accessories, which will manufacture bicycle parts has also been set up at Mandaiyur.

Proposed Large Scale Units—Dissolving Pulp and Viscose Staple Fibre.—The Tamil Nadu Industrial Development Corporation Limited (TIDCO) has a proposal to set up a plant for manufacturing dissolving pulp and viscose staple fibre in this district at a cost of about Rs. 80 crores. The plant will have a capacity of 120 tonnes per day of dissolving pulp and 40 tonnes per day of viscose staple fibre and is to be set up in suitable stages. TIDCO has appointed consultants to draw up the project report for the plant. The plant will require, for its raw material, 1 lakh/1.60 lakh tonnes per year of eucalyptus hybrid and other varieties of wood, 16 million gallons of water per day, 250 tonnes of coal per day and adequate power and transport facilities. The plant is likely to be located near the northern border of the district, in the proximity of Tiruchirappalli. Water, an essential requirement for the plant, is

proposed to be supplied by a branch channel of the Cauvery, i.e., Kattalai High Level Channel and during off-season, special arrangements are proposed to be made for supplying water through a link bed channel. The location of the plant near the northern border is expected to facilitate the supply of water as well as coal.

The plant, when it goes into production, will provide direct employment to about 2,000 persons and indirect employment to about 8,000 to 10,000 persons.

Hard Board.—The State Industries Promotion Corporation, Tamil Nadu Limited (SIPCOT) has recommended the location of hard board plant in Pudukkottai district. The plant will involve an investment of Rs. 292.75 lakhs including foreign exchange components of Rs 98.07 lakhs. The raw material for this plant also is eucalyptus wood and plenty of water (about 2.40 lakhs cu. metres per annum). The plant, when set up, will afford employment to 180 persons.

However, the project is under re-examination owing to the limited supply of dry wood expected to be available till 1981.

Maize Processing.—The Tamil Nadu Agro-Industries Corporation Limited has a proposal to set up an industrial complex for processing maize to manufacture a number of utility end-products for use in food, industrial and pharmaceutical, like dextrose, glucose and starch. The project would involve an investment of Rs. 5 crores over a period of 2 or 3 years. The plant would require plenty of water but the effluent water can be used for irrigation purposes. The project will have an employment potential of about 500 to 1,000 workers. Suitable sites for locating the plant have been identified in Alangudi and Tirumayam taluks.

Vanaspathi.—Another project which is under consideration is a Vanaspathi Plant with a capacity of 200 tonnes. Groundnut which is the basic raw material for this industry, is available in plentiful supply in the district, Alangudi being a major marketing centre for groundnut in the district as well as in Tamil Nadu.

The potential for small industries.—The employment potential of this plant is 150. The SISI has, in its *Report*, recommended that feasibility of setting of the following types of industries based on the district's agricultural resources be investigated.

Groundnut Oil crushing and Refining.—While 46,400 tonnes of groundnut kernels are available in the district annually, the quantity crushed by the oil mills in the district is about 20,000 tonnes. There is, therefore, scope not only for more oil crushing units but also for oil refining plants at Alangudi, which is a major market for groundnut. A plant with a capacity to crush 20 tonnes of oil seeds and 5 tonnes of oil refining per day will require an investment of Rs. 4 to Rs. 5 lakhs by way of plant and machinery and about Rs. 19 lakhs by way of working capital for three months. It can employ 42 persons.

Power Ghani.—For decentralised industrial development power ghani for crushing groundnut kernels may be set up. Each Ghani costs about Rs. 5,000 and can crush 150 kg. of oil seeds in four hours, employing 2 persons. In a single unit, 10 ghani can be operated. A unit with a capacity of crushing 3 tonnes of groundnut per day will have to invest Rs. 2.10 lakhs in working capital and 3 months stock has to be held.

Cashew Nut Processing.—While the quantity of cashew nut produced in the district is about 1,850 tonnes per annum (which is likely to increase by 80 tonnes annually during the Fifth Plan period owing to the increase in the area under Forest Department Plantations), there is only one unit in the district (at Gandharvakottai) processing 200 to 250 tonnes annually. There is thus scope for a few more units in this industry which is an export-oriented one. A unit to process 4 tonnes of cashewnut per day for 250 days in a year by shallow oil roasting process will require an investment of Rs. 90,000 by way of plant and machinery and Rs. 6,25,000 by way of working capital for three months. Such a unit can provide employment to 341 persons.

Cashew Nut Shell Liquid.—The same units as suggested above may also undertake extraction of cashew nut shell liquid which accounts for 16 per cent of the weight of the cashewnut. This liquid is a

valuable foreign exchange earner and is used in foundry, automobile, and paint-and-varnish industries and as an anti-corrosive coating for ships and boat hulls. The unit at Gandharvakottai (mentioned earlier) is also producing one barrel (of 200 Kgs.) of Cashew Nut Shell Liquid per day, which is sent to Quilon for refining. The same unit can also process 50 tonnes of cashew shell liquid per annum. A unit to process 500 Kgs. per day of liquid resins will require a total capital investment of Rs. 80,000 consisting of Rs. 50,000 in plant and machinery and the rest in working capital.¹

Processing of Cashew Apples and other fruits.—Considerable quantity of cashew apples (9,250 tonnes to 11,100 tonnes per annum) is available in the district, the bulk of which is presently used as manure or cattle feed or is wasted. This can be used along with jack (fruit large quantities of which are available in the district) tomatoes and other fruits for the manufacture of jams, squashes etc.,. Investment for a unit with a capacity of 1/2 tonne per day will require Rs. 40,000 by way of plant and machinery and, Rs. 60,000 for working capital for three months.

Tamarind Kernel, Powder Starch and Phosphates.—About 5,000 tonnes of tamarind seeds are reported to be available in the district annually and they are sent to Kerala for preparation of cattle feed, etc. Tamarind seeds can be used for the manufacture of starch powder which is used as a sizing material in textile and handloom industries as well as by jute mills and plywood manufacturers. A small scale unit with a capacity of 2 tonnes per day (300 working days per annum) will require Rs. 97,000 by way of plant and machinery and Rs. 1.32 lakhs by way of working capital for three months. The unit can provide employment to 5 persons.

The National Chemical Laboratory, Poona, has developed modified tamarind kernel powder and a process for the manufacture of its phosphate. An optimum size unit of 300 tonnes per annum

¹ The Director, Industries and Commerce informs us in a communication dated 24th January 1976 that the cashew nuts in Tamil Nadu are facing problems in getting raw materials. Under the Import Trade Control policy, units started after 1st September 1970 are not eligible for allotment of important raw cashew nuts. Labourers engaged in the cashew industry have, in fact, suffered retrenchment on account of a ban on the movement of cashew nut into Tamil Nadu from Kerala. The potential for cashew nut processing, cashew nut shell liquid etc, is, therefore, subject to these handicaps at present.

will require an investment of Rs. 2.58 lakhs Rs. 1.30 lakhs in building and machinery and the rest in working capital.

Tannin from Cashew Testa, Babul and Tamarind Seed Husk.—Cashew testa, the thin brown skin covering the cashew kernel, is an important by-product of the cashew industry and contains condensed type of tannin which is used in leather tanning industry. The Central Leather Research Institute has developed a process for the manufacture of vegetable tannin extract using tamarind seed husk and in blending with myrobolan, babul, etc. A plant with a capacity of 3 tonnes solid/spray dried extract or liquid extract requires an investment of Rs. 6 lakhs for plant and machinery in the case of solid extract plant and Rs. 14 lakhs for spray dried extract. Working capital requirements will be Rs. 3.75 lakhs.

The SISI has also recommended an examination of the possibility of setting up industries based on the districts fisheries and marine industries, on the following lines.

Fish Processing:—With the implementation of various schemes for development of marine fisheries as contemplated in the Perspective Plan drawn up by the Task Force on Fisheries set up by State Planning Commission, production of fish is likely to increase five-fold during the Fifth and Sixth Plan periods in the State as a whole. The output of marine fisheries will also be export-oriented. Thus, scope is indicated for small scale plants for fish processing, fish canning, etc. A small scale unit for freezing fish and prawns (2 tonnes per day of canned fish and $\frac{1}{2}$ tonne per day of prawns) will require an investment of Rs. 2.5 lakhs and Rs. 1 lakh respectively by way of machinery and equipment and Rs. 3 lakhs and 1.25 lakhs respectively, towards working capital.

Fish Meal.—Only a very small quantity of the fish landed in Tamil Nadu is used for manufacture of fish meal. The Task Force on Fisheries in its report cited above contemplates considerable increase in the manufacture of fish-meal during the Fifth and Sixth Plan periods to meet not only the domestic demand for poultry feed purposes but also for export. Besides

marine fish available in the coastal areas of Arantangi Taluk, small sized inedible fish are also available in the estuarine areas of this taluk in about 100 tanks. There is scope for a unit for the manufacture of fish meal with a capacity of 50 tonnes per month, involving a capital outlay of Rs. 50,000 by way of machinery and equipment and Rs. 1.21 lakh for working capital for 3 months. It can provide employment to 7 persons.

Boat Building-cum-Servicing and Repairing.—The Task Force cited earlier envisages 3,430 small mechanised boats to operate in the State by the end of the Sixth Plan (1984) while, presently, only 1,555 boats are in operation. The two important fishing harbours in the adjacent coastal area of Thanjavur district, namely, Nagapattinam and Mallipattinam will have 50 and 180 small sized mechanised boats in operation by the end of the Sixth Plan period. The operational range of small size mechanised boats is reported to be about 20 kms. Hence, there is scope for setting up a mechanised boat-building, cum-servicing unit at Mimisal in Arantangi taluk for decentralised fishery development. A boat building unit with a capacity of 18 boats (of 30' length) will require Rs. 30,000 by way of Plant and machinery and Rs. 62,000 by way of working capital and can employ 73 persons.

Marine and Salt-based Industries :—The district, with its newly added seashore, offers scope for marine and salt based industries, like the production of (i) free flowing table salt, (ii) dairy salt, (iii) high purity salt, (iv) cattle licks salt, (v) distilled water, (vi) magnesium carbonate (light basic from bitters), and (vii) bromine from bitters. The Central Salt and Marine Chemical Research Institute (CSMCRI), Bhavanagar, Gujarat has developed processes for all these, and may help entrepreneurs with advice.

Lime from Sea Shell.—Industrial and chemical grade lime required by the various chemical, paper and sugar industries can be manufactured from sea shells available in the coastal areas of Arantangi. The investment required for a unit with a capacity of 1,500 tonnes per annum will be Rs. 11,900 by way of plant and machinery and Rs. 33,425 by way of working capital. The unit can provide employment to 12 persons.

The S.I.S.I. has suggested that certain "demand based" industries can be set up in the district with modest capital investment as following :—

Synthetic Detergents :—Synthetic Detergents recently introduced in the country as a substitute for washing soap are becoming increasingly popular. The proportion of synthetic detergents to soaps by 1978-79 is expected to be 50 : 50. The Government of India have adopted a policy of encouraging synthetic detergents in view of the acute shortage of oils and fats. There is, therefore, good scope for this industry. The Regional Research Laboratory, Jorhat has developed a process for the manufacture of synthetic detergents based on paddy husk which is available in rural areas. The plan developed by the laboratory with a capacity of 50 kg. per day (300 days a year) requires a capital investment of Rs. 4,750 including Rs. 2,750 towards working capital.

Cattle and Poultry Feed.—There are about 300 cross-breed (exotic) cattle in the district. The requirement of cattle feed per animal per day is 5 kg. and the total requirement per year would amount to about 540 tonnes. Besides, there would be additional requirement for feeding non-cross breed cattle in the district and also as a consequence of implementation of dairy development programmes. Besides, the district has 336 poultry units each with 110 birds. The feed requirement of these units would be 696 tonnes per annum which is likely to go up to 1,344 tonnes per annum when all the units begin to function. There is therefore scope for a poultry feed and cattle feed unit. A unit with a capacity of 2 tonnes for cattle feed and 5 tonnes for poultry feed per day will require Rs. 50,200 and Rs. 52,500 respectively towards plant and machinery and Rs. 68,500 and Rs. 1.79 lakhs respectively by way of working capital for 3 months, and can provide employment to 20 and 16 persons respectively. The unit, besides catering to the local requirements, may have to seek markets outside the district until such time as the local demand increases (with the implementation of various Dairy and Poultry Development Schemes) to match the output of this unit.

Chalk Crayons.—The total annual requirements of chalk crayons by educational institutions in the district (Schools and Colleges) is estimated at 35,000 boxes of 100 sticks each. Till recently, chalk crayons were being supplied to Government schools by the Government Production Unit at Nanguneri, Tirunelveli district while private schools, colleges and Panchayat Union schools were obtaining their requirements from other sources. Since there is good local demand for chalk crayons by the educational institutions alone, which is likely to increase with the spread of educational facilities and as limestone is also available in the district, there appears to be scope for setting up a few small scale units in this line. A small scale unit with a production capacity of 100 gross per day will require a capital investment of Rs. 2,000 by way of equipment and Rs. 2,850 by way of working capital for three months. Such a unit can provide employment to three persons.

Steel Castings.—These are required for all engineering industries such as Railways, Automobiles, Machine Tools, Industrial Machinery, etc. Presently, there are 44 steel foundries in the country in the organised sector with a total installed capacity of 1.50 lakh tonnes per annum (1973). Their actual production in 1973 was, however, 70,000 tonnes only. The targeted level of production of steel castings by the end of the Fifth Five Year Plan (1978-79) is 2.30 lakh tonnes. The output of engineering industries in the country, with which the manufacture of steel castings is closely linked, is expected to almost double during the Fifth Five Year Plan period. Further exports of engineering equipment are also envisaged. The requirements of steel castings for BHEL, Tiruchirappalli alone is 700 tonnes per annum, which is expected to reach 1,500 tonnes when its expansion programme is completed. Besides Golden Rock Workshops of the Southern Railway require 240 tonnes of steel castings annually. The State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT) have also recommended the setting up of steel foundries each with a capacity of 200 tonnes per month in a few districts of Tamil Nadu including the composite Tiruchirappalli district. There is, therefore, scope for a steel foundry which may be set up in the backward taluk of Kulattur or Tirumayam. The total amount of capital investment required will be Rs. 70 lakhs including Rs. 40 lakhs for plant and machinery.

The independent requirements of Golden Rock Workshops are as follows :—

1. Machined and Forged Stores.
2. Steel Castings.
3. Fasteners.
4. Bushes.
5. Vacuum Cylinders.
6. Pins.
7. Ferrous Castings—rough or finished.
8. Forgings—rough or finished.
9. Sub-assemblies.
10. Non-ferrous castings—rough or finished.
11. Electrical items.
12. Rubber and Rubber-based items.
13. Items machined from Standard Stock—ferrous or non-ferrous.
14. Plastic Epoxy insulating materials.

There are 3 textile mills in the district with a total capacity of 55,660 spindles and 122 looms. These mills require the following items :

(a) Spindle tape, (b) Paper cones and tubes, (c) Wooden bobbins, (d) Polythene bags for paper cones, and (e) Apron leathers.

There is scope for small scale units to explore the possibilities of manufacturing these items within the district as the requirements are now met largely from outside.

In their *Techno-Economic Potential Survey of Tamil Nadu*.—(Draft Report) Volume I¹, the Tata Economic Consultancy Services have suggested that units be set up in Pudukkottai district for the manufacture of chip board, groundnut oil, 'activated carbon' and tartaric acid. They observe : "The area under eucalyptus in the district is about 5,500 hectares. According to

¹ Prepared for the Inter-Institutional Group of Tamil Nadu and made available to the Gazetteer Unit by the State Industries Promotion Corporation of Tamil Nadu.

knowledgeable forest officials in Pudukkottai, the existing eucalyptus plantations can easily support a small scale unit to produce 2 tonnes of chip board per day which requires 6 tonnes of logs to be obtained from eucalyptus plants¹. It is suggested that such a unit be located in the district.

Groundnut is grown in large quantities in the district. While there are some units to extract oil from groundnut seeds, their present capacity is reported to be inadequate. There is therefore scope for one small scale oil extraction unit. The recommended crushing capacity of the unit is 20 tonnes of seed per day.

Activated carbon can be manufactured from paddy husk which is available in large quantities. It is used for purification purposes in the fine chemical, pharmaceutical and food industries and has a large market within the country. In fact, a substantial quantity of it is imported every year to supplement indigenous production. A small scale unit can be therefore set up in this district.

Tartaric acid can be made from tamarind leaves which are available in large quantities in this district. This is an important chemical intermediate used extensively in fine chemical and pharmaceutical industries. There is good demand for it within the country and it is growing. A part of it is being met from imports. Therefore a small scale unit for producing this item can be set up in this district.

SIDCO has also plans to establish an industrial estate at Arantangi. Fourteen applications have been received from new entrepreneurs who desire to take sheds on a hire purchase basis in the proposed estate at Arantangi.

Besides the two places mentioned above, SIDCO has also proposed to establish an Industrial Estate at Ponnamaravathi in Tirumayam Taluk. Ponnamaravathi is surrounded by important towns like Karaikudi where the Electro Chemical Research complex is located, Pudukkottai town and Madurai. These towns

¹ It is felt that this suggestion, however, requires re-examination since, as in the case of hard board, continuous and assured supply of wood is necessary. The only chip board plant in this state now existing at Rajapalayam is reported to be not working to its full capacity

offer a wide market for all types of products. Singampuneri where there is an unit of Enfield India, is only 20 kilometres from Ponnamaravathi and hence the possibility of starting ancillary industries at Ponnamaravathi to Enfield India are also ample. Applications are being received from entrepreneurs requesting construction and allotment of worksheds at Ponnamaravathi.

TRENDS AND SCOPE.

Moving that the Third Five Year Plan draft outline be taken into consideration by the Lok Sabha, the then Prime Minister Jawaharlal Nehru observed on August 22, 1960 : "It is said that the National Income over the First and Second Plans has gone up by 42 per cent. A legitimate query is made : where has this gone? To some extent, of course, you can see where it has gone. I sometimes do address large gatherings in the villages and I can see that they are better fed and better clothed, they build brick houses. . . . Nevertheless, this does not apply to everybody in India. Some people have hardly benefited. Some people may even be facing various difficulties. The fact remains, however, that this advance in our national income, in our per capita income, *has* taken place : and I think it is desirable that we should enquire more deeply as to where this has gone and appoint some expert committee to enquire into how exactly this additional income that has come to the country or per capita has spread."

A large number of studies were, consequently, conducted which have revealed that there has been a concentration of economic power in the hands of the captains of industry in the process of industrial development. The Mahalanobis Committee of 1960 which enquired into "the extent to which the operation of the economic system has resulted in concentration of wealth and means of production", the Monopolies Inquiry Commission (1964) which was asked "to enquire into the existence and effect of concentration of economic power in private hands", and the study (1966) made by Prof. R.K. Hazari, at the instance of the Planning Commission, into the operation of the industrial licensing system over the first two Plan periods, and the Industrial Licensing Policy Inquiry Committee (1969) have led to the formulation of an industrial policy that aims at accelerating the pace

of industrial development but avoiding concentration of economic power and providing adequate opportunities for medium and small entrepreneurs.

As *The Gazetteer of India*¹ (1975) has explained, the maximum growth of small scale industries in the country has taken place largely over the last decade. They comprise enterprises with an investment upto Rs. 10 lakhs in machinery and equipment. They use modern equipment and techniques of production and management. Not only have small scale industries grown in numbers, the products of many of them conform to standards and specifications prescribed by the Defence Services, railways and several large scale industries. A number of small scale units supply parts and components to large industries engaged in the manufacture of machine tools, bicycles, automobiles, coach building and other railway equipments, and electronic and electrical appliances and machinery. Products of some of these industries are exported. Several new items, parts and components requiring high technology and precision are made in this sector thus minimizing their imports.

Small scale industries have been assigned a vital role in our development strategy for three main reasons which have assumed social and economic importance in recent years. Firstly, this sector can provide employment opportunities for surplus labour force at a relatively smaller capital cost. Secondly, small scale industries are useful and effective for mobilizing untapped scarce resources of capital and entrepreneurial skill. Thirdly, these industries are expected to ensure the diffusion of productive industrial activity in order to (a) avoid concentration of industry leading to flow of population to metropolitan cities causing socio-economic and political maladies of concentration, (b) create employment opportunities in areas where large additions to labour force accrue year after year and foster balanced development of all parts of the country and (c) promote progressive rural economy through the establishment of economic and functional links between the rural or semi-urban areas and the cities.

1. Volume III—*Economic Structure and Activities*.

The industrial units recommended by the Small Industries Service Institute for Pudukkottai district require modest investments on plant, machinery and working capital. They fall within the definition of small industries. The following statement shows their investment, capacity and employment implications.

The installation of the small industries recommended for Pudukkottai will form part of the national industrial pattern and will be a tribute both to the initiative of the newly rising class of entrepreneurs from hitherto trading and agricultural interests, and also to the positive efforts taken by Government to encourage them.

The Pudukkottai district has an enviably rich livestock population ; richer than the State's average, as may be evident from the following statistics.¹ :—

		Number of animals per 100 of human population.	
		Pudukkottai District.	Tamil Nadu State.
Cattle	..	46	25
Buffaloe	..	13	7
Sheep	..	27	13
Goat	..	12	10

The sizable population livestock in the district, ensures abundance in hides and skins, which are the raw materials for leather industry. These raw materials are also moved into the District from Thanjavur and Ramanathapuram districts.

The weekly market at Pudukkottai attracts buyers from Tiruchirappalli and Dindigul. Approximately, goods worth Rs. 90 lakhs, are traded in here, every year. Despite this abundance of raw materials, their systematized processing does not take place in the district. There is only one tannery at Pudukkottai, with a processing capacity of 1000 hides a month. About

¹ Report of the Special Survey conducted by the Central Leather Research Institute (CLRI), Madras on the availability of raw hides and skins, and of the position of tanning and foot-wear industry in Pudukkottai district, for the Pudukkottai District Gazetteer.

30 leather buckets for lifting water in mhotes or kavalais)-(கவலை) are made here every month. But this business faces a stiff competition from canvass-buckets, which, though not so long lasting as leather buckets, are cheaper substitutes. The local footwear industry is very negligible and is limited to the scattered cottages of cobblers. The local demand, which too is meagre, is met by the supplies from the towns outside the district. There is vast scope for development of tanneries, and manufacture of leather goods in the district. But the absence of co-operative institutions and lack of skilled labour stand in the way.



सत्यमेव जयते

CHAPTER VI—BANKING, TRADE AND COMMERCE.

Into Pudukkottai—a land of modest production and consequently, poor incomes and savings—came the Nattukkottai Chettis, centuries ago. Money-spinners of great dexterity, they advanced credit to Pudukkottai agricultural and artisan classess. With their growing wealth they financed the building of temples and extended patronage to literature and the arts. The Nattukkottai Chettis constitute today one of the foremost non-banking financial intermediaries of the country. How do they actually operate? Where is the line drawn in their practices between money-lending and indigenous banking ?

The lead given by the Chettis has been taken up by commercial banks, in the co-operative and nationalised sectors, which provide investment, stimulate savings and offer much-needed credit.

Money.

The Early use and Management of money.—In very early times, when the range of commerce was small and its systems, primitive, barter was the method of purchase. Monetary units, however, have been in evidence from ancient times. Nilakanta Sastri¹ refers to an inscription of Pandya days which stipulates the collection of a tax on dry land at the rate of one *panam* per *ma* and 1/16th *panam* on every areca palm, five *panam* on every *ma* of land which produced sugarcane, plantain, etc., and two *panams* a year for every house. An inscription of Pallava times, available at Narttamalai (Kulattur taluk) prescribes a penalty of twenty-five *kalanjus* of gold as fine for breach of an agreement². The *Pudukkottai State Inscriptions* also speak of *Rasippanam*, *Varahanpanam*, *Genpakakulikai panam*³. But until the 19th century, money denoted only a primitive means of coinage that was used to establish a secondary facility for an exchange of goods among the people in a given territory.

¹ The Pandyan Kingdom, (1972).

² M.S.S. Sarma has fixed the date of this inscription as the times of Pallava King Vijaya Nripatunga Vikrama (862-888 A.D.).

³ A Manual of the Pudukkottai State, (1940).

With economic advance and the resultant increase in the demand production and supply of goods "the artifice of money as a medium of exchange"¹ had to be made stable and pervasive. As John Stuart Mill put it, there can scarcely be a more insignificant thing in a society than money, and yet, because it is "a machine for doing quickly and commodiously" what would otherwise be done at a great loss of time and labour, has steadily increased in importance as an economic instrument of the people and government. Today we cannot think of any economy without it. The first major steps in giving money the shape of an economic instrument were taken by the East India Company which had found 994 different coins of gold, silver and copper of varying weights, denominations and fineness in circulation in our country. The Company sought to standardise the currency by introducing a unified coinage system. The silver rupee of 180 grains, having 165 grains of pure silver, was the first standard coin introduced in 1835 for the whole of British India. This was the beginning of organised monetary management in our country. From this time, the regulation of the monetary system has been shaped and reshaped by the Government not only to suit the changes in the economic scene of the country but also to meet the developments in commercial relationships with other countries of the world. The British Raj ensured the circulation of its currency all over India including the princely States, although the minting of some coins for internal circulation was occasionally permitted. To a request made by the Darbar of Pudukkottai in 1908 for permission to mint Pudukkottai's traditional copper coin—the Amman Kasu, the Government of India informed² Pudukkottai that it was "averse to the revival of minting in a State where it has not been carried on for five years and that, therefore the proposal of the Darbar to coin their Ammankasus cannot be approved". Pudukkottai like the other States was subject to the monetary systems of British India.

"Monetary management" and "banking" have emerged as crucial economic concepts. Highly developed system of banking determined the volume of credit and currency, and regulate their cost and direction.

¹ W.A. Koivisto in *Principles and Problems of Modern Economics*, (1957).

² Darbar records, Pudukkottai.

Bank as institution for facilitating economic transactions are, of course, not entirely new. "Banking" activities like safe-custody and money-lending should have been undertaken from early times by individuals who had no notion of "banking" as such. The Banking Commission observes :¹ when the British came to India in the 17th century they found a reasonably well established indigenous banking system. The English traders, however, could not avail themselves of the credit facilities extended by the indigenous system, as business was conducted in the vernacular languages with which the British were not conversant. On the other hand, indigenous bankers were ignorant of the ways and methods of banking practised in the West. To overcome these difficulties, English merchant-houses were set up which took upon themselves the business of banking in addition to commercial and trading activities. The outcome was the the foreign trade of the country passed into the hands of British financial institutions. It goes on to explain how the British had an adverse impact on the indigenous agencies but were yet unable to drive them out of business. The indigenous agencies survived because they remained severely aloof from the early Europe banks, with their distinct and separate character and functions. The indigenous banker concentrated on lending money to the peasant and the artisan and to traders. The foreign banks on the other hand, financed external trade and provided remittances and deposit facilities. The two systems kept apart thus until recent times, when some indigenous bankers have established contact with commercial banks through "bill discounting facilities" resulting in an increase of their capital resources.

The expansion of economic activities resulted in the institutional growth of banks in all the countries. The shortage of cash on the part of the Crown gave birth to the Bank of England as early as 1694. The founders of this bank obtained from the King "limited liability and acceptability of their notes" in lieu of a loan of £1,200,000. This bank eventually monopolised the issue of bank note as currency and in course of time came to co-ordinate banking and monetary policy. The Bank of Sweden was established in 1666. France had one in 1800, Netherlands in 1814 and Belgium in 1835. The Federal Reserve System came into force in U.S.A. in 1914.

¹ Report of the Study Group on Indigenous Bankers (1971).

Thus, when individual banking could no longer cope with the scope and complexities of commercial activities of the people, the organized banks emerged with a central body to co-ordinate and control them.

The establishment of a Central Monetary Authority on an all India basis was proposed by a large body of merchants as early as 1836. Ellis, a member of the Governor's Council, proposed a State Bank of India on the lines of the Bank of France in 1870. With the suggestion of Gold Standard as a remedy for the international trade-indebtedness the establishment of a central bank gained much support. But it was only after the government had to face the after-effects of World War I, that the Imperial Bank of India Act was passed in September, 1920, establishing the Imperial Bank of India, by amalgamating the three Presidency Banks. The Imperial Bank was "expected to be the friend, philosopher and guide of the banks rediscounting their bills and satisfying their wants for more credit currency", apart from "welding the banking system into a coordinated whole".

But in its working were noticed several short-comings. The Hilton-Young Commission (1926) recommended the establishment of a Reserve Bank. It pointed out the weakness of the system, under which the control of currency and credit was "in the hands of two distinct authorities whose policies may be widely divergent and in which the currency and banking reserves are managed separately one from the other." But the Reserve Bank Bill, 1927, which followed the Commission's recommendations was dropped due to the opposition from the nationalist wing of the Assembly, which viewed that the provisions for public-control were not adequate. The proposals for creation of federal structure as Parliamentary reform, however, expedited the institution of Reserve Bank. The Reserve Bank of India Act, 1934, constituted Reserve Bank of India "to regulate the issue of bank-notes and the keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage".

The Reserve Bank is to-day the custodian of the nation's metallic and foreign exchange reserves. Responsibility for maintaining the value of the monetary unity stable, internally and externally, rests with it. The power of issuing currency-notes has also been

solely given to it. Monetary management is not, however, the only function of the Reserve Bank. It functions as the Government's bank. It operates accounts of the Central and State Governments. Management of the Public Debt of the Government is one of its functions. It also acts as an advisory body to the Government on all monetary and economic matters. All commercial banks in the country are subject to the control and supervision of the Reserve Bank. They have to keep a fixed cash reserve with the Reserve Bank, which strengthens the banking system. The Reserve Bank functions as the 'banker's bank' and facilitates the inter-transactions between them. It is the controller of credit in the country. This, it achieves by varying the 'bank rates' or by 'open market operations'. Thus it can expand or contract the credit situation in the country.

The Reserve Bank of India is, however, only the apex organisation. There are several other banks which form part of the system. They are : (i) the State Bank of India and its subsidiaries ; (ii) the fourteen leading commercial banks which were nationalised in 1969, (iii) several medium sized commercial banks; and (iv) indigenous bankers, viz., individual bankers and partnership banking firms.

Banks in the organised sector may be broadly classified into agricultural banks and industrial banks. The agricultural banks in our country have been organised on a co-operative basis. These include Rural Credit Societies and Land Development Banks.

At the centre of the village's credit structure is the ubiquitous money lender. He gives loans for both consumption as well as production requirements of the cultivator and artisan. While money lenders can be birds of various feather, their techniques of lending and account-keeping are simple enough. They are simple and yet, by their very simplicity, quite tyrannical on the creditors. Usually the security for an advance is either the cultivator himself or his crops. Spending on account of farm compulsions or, worse social compulsion combined with money

¹ In our country, we do not have 'pure' industrial banks as such but there are many industrial financial institutions of the Government like the Industrial Development Bank of India, the Industrial Finance Corporation, the Unit Trust of India, the National Industrial Development Corporation.

lenders' exorbitant rates of interest and the borrowers' low earning (and, therefore, returning) capacity have made rural indebtedness endemic. Money-lenders can advance both in cash against security for short durations and generally in short amounts or against kind also—seeds, cattle. They do not accept deposits. Town money-lenders finance traders apart from lending to labourers and artisans for consumption purposes. Most advances of this type are unsecured short-term advances. These are exclusively in cash. Repayment, unlike in villages, is quite prompt in towns. Some urban money-lenders accept deposits. Pawning is prevalent in both villages and towns. Pawn-brokers lend against the pledge of gold, jewellery, silver, copper or brass utensils. The advances are generally of amounts 40–50 per cent lower in value than the pledged articles. Repayment in pawn-broker's shops and the redeeming of the articles is, therefore, quick.

Apart from these, and more sophisticated in technique and clientele, is the indigenous banker—a cut above the pack. According to the Report of the Study Group on Indigenous Bankers, Banking Commission (Government of India), Bombay, 1971 ; “Both the money-lender and the indigenous banker make loans ; but unlike the former, indigenous banker also deals in credit instruments and / or receives deposits. He has a larger working capital than the money-lender, made up of owned as well as borrowed funds. Whereas, both the indigenous banker and the money-lender make clean loans and partly secured loans, some indigenous bankers make only secured advances. Repayments to the banker are more regular and the rates of interest charged by him are lower than in the case of the money-lender who lends for heterogeneous purposes and incurs a larger risk. The indigenous banker deals in credit instruments which have to be met on demand or on the due date. He is, therefore, reluctant to finance agriculture where fortunes are apt to fluctuate with the vagaries of the monsoon. He prefers to provide short-term accommodation rather than keep the capital tied up for indefinite periods because short-term lending ensures quick turn over of the capital. Further, the indigenous banker is reluctant to entertain very small advances in order to keep his overheads at a minimum. Compared to the money-lender, on an average he prefers to lend larger amounts to a smaller number of clients. For all these reasons, the indigenous banker has avoided

making advances to agriculturists who often require small sums of money for indefinite periods. In the rural areas, therefore, the necessity for the money-lender has been keenly felt and despite the Government's emphasis on the co-operative movement, the money-lender has survived because of the inelasticity, delay and inadequacy of co-operative finance.

The indigenous banking profession is looked upon as hereditary and it is also by and large confined to a few castes and communities, such as. . . the Nattukkottai Chettians."

The role of Nattukkottai Chettians in the socio-economic life of Pudukkottai district has already been touched upon¹.

Indigenous Banking in Pudukkottai.—In the words of Sashiah Sastri²; "The Nattukkottai Chettis are a class of very enterprising people who have their homes partly within the limits of Pudukkottai and partly within the limits of the Madurai District. These are the Sowcars and Mahajans to the agricultural classes. Though their chief business is banking, they also export and import largely. They have their chief business at all the principal towns, Macras and Calcutta included, and have branches all along the Sea Coast and on the other side of the Bay and extending also to the Straits and to Ceylon. Their chief ambition is to invest riches acquired abroad in the purchase of lands in the vicinity of their houses to which they periodically return". Even though the organised commercial banks are gradually replacing the individual money-lenders in their role of financing the rural activities, still it cannot be said that the indigenous institutions of banking have completely disappeared from the villages.

On the indigenous banking in Pudukkottai District, S. Natarajan Secretary to the Pudukkottai Co-operative Central Bank writes³: "Looking retrospectively at the development of banking institutions in the Pudukkottai area the activities of indigenous bankers and money-lenders were dominating till 1910, which year marked the commencement of the banking system in Pudukkottai district. In the erstwhile Pudukkottai State, the Darbar Treasury was acting as the bank receiving surpluses from the public, granting loans for

¹ See Chapters II and III.

Report on the Administration of Pudukkottai—1880-81.

In a Note for the *Pudukkottai District Gazetteer*, dated 25th November, 1978

the selected schemes, in addition to the indigenous banking system. The Commercial Bank branch registered its presence in the year 1938. The indigenous banking system was practised by the professional money-lenders, merchants, traders, zamindars, etc., and they were solely acting till the development of commercial banks. They were variously called as Shroffs, Rowihars and Nattukkottai Chettiars, who were functioning mainly in the areas of Arimalam, Kulipirai, Kadiapatti, Ponnamaravathi, Pudupatti, Rayavaram, Andakkulam, Puthambur and Pudukkottai. In Arantangi taluk petty traders, landlords and zamindars used to lend money to the agriculturists and a few of such agents were dominating the entire taluk till co-operative extended similar activities. Such indigenous bankers were lending money, acting as money changers and financing the internal traders, by means of hundies or internal bills of exchange. There were 3 types of indigenous bankers, viz., those whose main business was banking, those who combined their banking business with trading and commission business, and those who were mainly traders and commission agents, but who did a little banking business also. The majority of the indigenous bankers belonged to the second group. Nattukkottai Chettiars were mainly engaged in banking and they did not combine other types of business or trade with their banking activities. But Chettiars in Alangudi, Karamakkudy and Keeramangalam areas combined both banking and other types of business. The business of the indigenous bankers was generally a family concern, having their own working capital. They did not generally get deposits from the public, as is being done by joint stock bankers but in some exceptional cases, some of them accepted deposits from their friends and relatives. They granted loans against all kinds of securities such as gold, jewellery, lands, promissory notes, hundies, etc. The indigenous bankers did not normally have contact with the other banking institutions in the country and they functioned in monopolistic position till 1940".

But the old hundi firms of the Nattukkottai Chettiars are now dying out. Some of them have converted themselves from proprietary concerns into partnership concerns. Some have joined together to form small banking companies. A number of such small banks have merged with larger banks.

These indigenous financing or lending agencies cannot now suffice to meet the credit requirements of rural society. An improvement in the status and dignity of our rural population having now become a national imperative, its credit needs can no longer be left to the caprice of individual financial intermediaries. While these agencies may continue to function under regulations and against the competitions offered by the organised banking sector, their area of operation has shrunk.

While the banking system has hitherto concentrated in urban areas, it is now acquiring a rural orientation. The nationalisation of banks in 1969 was a step towards this direction.

The Nattukkottai Chettiars have been active in the districts of Madurai, Ramanathapuram, Thanjavur, Tiruchirappalli. Pudukkottai is also one of the traditional centres of their operation. Gubbay, one time Finance Secretary has made the following observations¹ : "A special type of indigenous bankers is that of the Chetti community in Madras. It is known that in many cases accounts can be maintained with these Chetti bankers on time deposits at rates much above those which are available from the banks. I see no reason to doubt... that their participation in the financial life of the community as a whole must be on a very extensive scale. Further, they are in intimate daily touch with those with whom they transact business. There must be accumulated with these private bankers, a store of knowledge and experience of the standing, moral as well as financial and, capacity of individual Indian traders and Indian trading firms, their business connections and relations on which, if fully, organised and systematised, might possibly quite suitably rest an expansion of credit facilities from the banks".

L. C. Jain has said of them that "of all indigenous bankers, the Nattukkottai Chettis are perfectly organised and are the representatives of the highest development of indigenous banking in India".

To quote from the Report of the Study Group on Indigenous Bankers, Banking Commission (Government of India), Bombay 1971; "..... At one time, the Nattukkottai Chettis had extensive banking business not only in India but also in Burma, the Strait

¹ M.M. Gubbay, C.S.I., C.I.E., Monograph on Chettiars quoted in the Report of the study group on indigenous bankers, Banking Commission, Government of India (1971).

Settlements, Ceylon and French Indo-China. ... Each Chettiar firm was an entity in itself. In spite of their pronounced individualism and self-help, the Chettiars had developed a strong tradition for mutual help and solidarity. The 'manimai' (a cess on the profits of business levied by the chettis), the fixing of the interest for the deposits and loans in a common place called 'Nagaraviduthi' in important trade centres are illustrations of the feeling of solidarity that existed in the community. The richer among them operated with their own funds. Those of them who were not rich enough to conduct the banking business on their own account, acted as agents to the members of their own community. In fact, the agent was the pivot of the Chettiar organisation. The agency system was peculiar to the Chettiars and possessed certain distinctive features. The pay of the agent varied according to the distance from the head office to the place to which he was deputed. The agent was given not only a fixed remuneration but was entitled to a certain percentage of the profits of the business. This encouraged honesty and acted as an incentive for the agent to be industrious. In this way, people of moderate means were elected to go as agents of banking firms to different parts in the south and to distant places like Burma and Malaya. The normal period of the agency contract was three years. The agent was required to send periodical statements to his principal regarding the business. On the expiry of three years, a new agent was sent out to relieve the old agent, who on his return was required to render a complete amount of his stewardship. He was either able to secure employment under the same employer or if he had accumulated sufficient capital could start out on his own. Different estimates have been given of the capital resources of the Chettiar community which show that there is no unanimity regarding the magnitude of their capital. The Madras Banking Enquiry Committee had given an estimate of Rs. 75 crores as working capital of the Chettiars based on the oral evidence of a leading Chettiar banker. Of these, Rs. 58 crores were owned funds and Rs. 17 crores represented borrowings. According to another Chettiar banker, working capital was Rs. 95 crores to Rs. 105 crores. The Assistant Commissioner of Income Tax, put it at Rs. 36 crores. According to the income-tax records, capital invested by 243 Chettiar firms was in the neighbourhood of Rs. 11 crores; Rs. 6.5 crores represented own resources and Rs. 4.5 crores borrowed funds.

There is no direct evidence of the borrowings of these bankers from commercial banks but indirect reference indicated that borrowed capital was 15 per cent of owned capital."

The relation between one Chettiar banker and another Chettiar banker consists in the granting of overdrafts and cash credits and allowing others to draw upon their firms in various centres of trade, or 'thulais' to facilitate transmission of funds, to enable marketing operations to be carried on easily and to raise funds. This system is called 'Adathai System' under which commission is charged on the turnover by way of 'Vindas' or 'vattam' (commission). In the matter of opening accounts the Chettiars are very careful and they are shrewd in the judgment of persons who ask for accommodation. This ability is almost in their blood or at all events the result of the environment under which they are living and comes partly by training. The doors are open to all sorts and conditions of men, but the line is drawn at dishonesty. The Chettiar does not care whether a customer is a friend or foe. He is not guided by personal feeling, for he knows that in banking there is no scope for them. If anybody comes for accommodation the chettiar generally distinguishes at a glance those transactions which are safe and legitimate from those which are unsafe and pernicious. Generally the Chettiar is always correct in his judgment.

In the case of 136 firms doing business in Chettinad to the extent of 11 crores of rupees the bad debts came only to Rs. 4.3 lakhs which works out at less than $\frac{1}{2}$ per cent¹ on the total volume of business. A Chettiar is also alert during the period of business. When anybody says that such and such banker is over-cautious, he will retort by saying that, that is one of the cardinal virtues, compared with the opposite evil of being over-credulous. Whenever the Chettiar has the shadow of a fear as to safety of a given transaction, without exception, he will give the benefit of doubt to himself. Even when he refuses credit to a customer he does so in a most tactful way without wounding the feelings of the borrower. Vague statements as to the wealth or credit, or worth of

¹ Report of the Madras Banking Enquiry Committee, Volume III, p. 1178. The Shroff Committee Report on Finance for private sector observes, while speaking about M ultani shroffs that only 1 per cent of their total lendings go to Court.

prospective clients are severely scrutinised and glib informants are given a sharp rebuff. The Chettiar knows, full well, that very often the informants are only a mere echo of antecedent echoes.

In the assessment of personal credit the Chettians as well as the Kallidaikurichy Brahmins are guided by a sound sense of scepticism. They take care to verify everything they hear about anybody and every body. They do not trust a man's means or safety of transaction as seen through the telescope of rumour, and the method they follow in assessing a man's worth is to divide by ten the popular estimate and take the quotient as the result required thus discounting very heavily every statement as to a man's estimate of his own wealth or of others. At times this principle is carried too far, consequently the customers find it difficult to get adequate money for legitimate commercial and financial operations.

Another kind of relationship between one Chettiar and another is that one banker stands surety to another for getting accommodation with any joint-stock bank like the Imperial Bank and the Indian Bank where they insist upon two signatures. In case a Chettiar urgently requires accommodation from the Imperial Bank, his brother Chettiar helps him by his signature to the Hundi¹ created in favour of the Imperial Bank.

The Imperial Bank before it gives accommodation to any Chettiar, first makes a reference to another Chettiar banker in respect of the assets and liabilities of the Chettiar requiring accommodation with the Imperial Bank. For this purpose the Imperial Bank has got a list of approved Bankers. All enquiries regarding the Chettiar bankers are referred to the bankers in the approved list. A Chettiar of real worth never fails to be heard by the Imperial Bank through the Chettiar bankers to whom reference is made regarding the credit and worth of the Chettians who want to become clients of the Imperial Bank of India. This is a real service rendered by the Chettiar bankers in the approved list to those who are not in it.²

¹ An instrument of credit created by the Chettians and discounted with the Imperial Bank to raise money. Two signatures are required for the creation of the Hundi.

² Indigenous Banking in South India by V. Krishnan.

Inauguration of Commercial and Co-operative Banking in Pudukkottai :

On the origin and functions of the commercial banks in Pudukkottai District, Natarajan says: "The first commercial bank branch at Pudukkottai was started in the year 1938 with the opening of branch of the Indian Bank, followed by the Indian Overseas Bank. When the erstwhile Pudukkottai State was merged with the Indian Union in the year 1948, there were only two branches of commercial banks—one branch of the Indian Bank and another of the Indian Overseas Bank. Thirty branches of commercial banks were started after 1948. The commercial banks branches now functioning at various centres in Pudukkottai district are given below:

<i>Serial number and name of the centres.</i>						<i>Number of commercial banks branches.</i>
(1)						(2)
1.	Manamelgudi ..	..	..	..	..	1
2.	Aranthangi ..	..	..	..	..	3
3.	Karambakkudi ..	..	..	..	..	1
4.	Alangudi ..	..	..	..	..	2
5.	Keeramangalam ..	..	..	..	..	1
6.	Pudukkottai ..	..	..	..	..	8
7.	Gandarvakottai ..	..	..	..	..	1
8.	Iluppur ..	..	..	..	..	1
9.	Keeranur ..	..	..	..	..	2
10.	Tirumayam ..	..	..	..	..	1
11.	Arimalam ..	..	..	..	..	1
12.	Rayavaram ..	..	..	..	..	1
13.	Konapet ..	..	..	..	..	1
14.	Nachandupatti ..	..	..	..	..	1
15.	Kulipirai ..	..	..	..	..	1
16.	Ponnamaravati ..	..	..	..	..	3
17.	Ramachandrapuram ..	..	..	..	..	1
18.	Alagapuri ..	..	..	..	..	1
19.	Rangiam ..	..	..	..	..	1
20.	Kothamangalam ..	..	..	..	..	1
21.	Koppanappatti ..	..	..	..	..	1
22.	Melasivabusi ..	..	..	..	..	1
23.	Avanipatti ..	..	..	..	..	1
Total ..						36

An important function of a commercial bank is to attract deposit from the Public. Those, who have cash balances but who want to keep them in a safe place deposit the same with a bank. The commercial banks not only protect them but also provide the depositors with a convenient method for transferring funds through the means of cheques. It accepts deposits from every class and from every source and in all cases without exception, it undertakes to repay the money either in part or in full in legal tender money. Deposits are of various types : demand deposit, savings deposit, fixed deposit, recurring deposit. The branches of various commercial banks in Pudukkottai district have mobilized deposits to the extent of Rs. 600 lakhs. As the entire Pudukkottai district is a backward area, depending upon agriculture, the deposit position is not very encouraging. The district records a low per capita deposit of Rs. 65; Tamil Nadu Rs. 74; India Rs. 96. In respect of advances, the district records per capita of Rs. 110 (including co-operative advances; Tamil Nadu: Rs. 107; India: Rs. 77). Out of the total 36 branches of the commercial banks, almost all the branches undertake advances to the various types of peoples for different purposes. The total advances put together by all commercial banks in Pudukkottai district have been estimated as Rs. 200 lakhs, as against the deposit position of Rs. 600 lakhs. Out of this amount, advances to agriculture by commercial banks represent Rs. 50 lakhs only and advances to other types viz., small scale industries, retail traders, road, transport operations, jewel pledge loans, etc., represent Rs. 150 lakhs. It is pertinent to point out that unless the commercial banks contribute much of their resources for the development of industries, trade and commerce in the area, there would be no industrial growth in Pudukkottai district. They may choose efficient entrepreneurs to be financed for the establishment of factories, industries and processing units. The developments of trade and commerce in this area depend on the supports and the assistance to be extended to the commercial bank. Finance is the life blood of industries. No industry big or small can function without adequate finance. For a long time, industrial developments in Pudukkottai area were hampered for want of adequate capital. In this context the responsibilities of the commercial

Each bank branch serves an average population of 30,000 in Pudukkottai district. This average is far below standards.

Out of the 36 branches of commercial banks, 28 branches are located in rural areas, 8 branches are located in urban areas, representing 75 per cent in rural area and 25 per cent in urban areas. Almost all the places in Pudukkottai district have been covered by the branches, still there are potential centres for opening of new offices like Annavasal, Mimisal etc., which remain unbanked centres. In general, commercial banks have to play a vital role in the industrialisation of Pudukkottai district.'

According to Natarajan: "Before the nationalisation of big 14 commercial banks, agricultural finance was purely undertaken by the banks under co-operative sector as monopoly. After nationalisation, commercial banks have also entered the sphere of agricultural finance with a view to supplement the co-operative credit. But there has been no significant progress in the commercial banks' role in the matter of agricultural finance, when compared to co-operative finance, which has been estimated as more than Rs. 800 crores in a year in the whole of India. In short, agricultural finance means advance by co-operatives.

The first banking institution in Pudukkottai district viz., Pudukkottai Co-operative Town Bank Limited, was founded in the year 1910 under co-operative sector. The co-operative movement was first introduced in erstwhile Pudukkottai state in the year 1908 four years after it was introduced in British India, by the Darbar of the State passing regulation No. III of 1908 on the lines of the Government of India Act X of 1904. Under this regulation, only credit societies could be formed. The idea of having a bank for the financing of the primary societies was not visualised. As in Indian provinces, where district urban banks, took up the financing of rural societies, the Pudukkottai Town Bank Limited, which was then a premier co-operative institution in the town and which was registered as an urban bank in the year 1910, took up the financing of the rural societies in the erstwhile State. This

system continued till the year 1920. In the meantime, regulation No. III of 1908 was replaced by regulation No VI of 1915 on the lines of the British India Act II of 1912. In this regulation, provision was made for registration of financing banks and supervising unions.

In conformity with the above regulation in the year 1920, the idea of starting a separate co-operative central bank for financing of primary societies took actual shape and the Pudukkottai Central Co-operative Bank Limited, was registered on 1—9—1920 in the erstwhile State. The Pudukkottai Town Bank Limited (1910) and the Pudukkottai Central Co-operative Bank Limited (1920). After this, two urban banks—Brahadambal Co-operative Urban Bank and Arantangi Co-operative Urban Bank were started. The Central Co-operative Bank provides short term and medium term credit to farmers through agricultural credit societies. With a view to provide long term credit, Land Development Banks were started and at present each block in the district is having one land development bank within the area. Co-operatives play a very significant role in the field of agriculture in Pudukkottai district. They act not only as purveyors of credit and other inputs to farmers, but also help in marketing produce. Credit is an important element in the successful implementation of agricultural schemes. Short term credits required for cultivation expenses are made available by the Pudukkottai Central Co-operative Bank through its affiliated agricultural credit societies, numbering 138 in the district. Every year, the officers of the agriculture department and of the co-operative in the district jointly examine in detail the cost of cultivation of various crops and fix the quantum of credit to be made available and the period over which the loans should be disbursed. The short term credit is advanced to both owner cultivators and landless tenants on personal security. The field staff of the agricultural credit societies prepare annual credit limit for each and every number of primary agricultural credit societies in advance of the season, keeping in view the package of practices. Based on these credit limits, withdrawals are made and disbursements effected just before the agricultural season by the agricultural credit societies.

Besides, these societies carry stocks of fertilizer with them, obtain seeds and pesticides from the agricultural depot and distribute them against kind component of the loan provision. Details of the agricultural advances, made by Pudukkottai Central Co-operative Bank through its affiliated credit societies in the district are given in the following table.

The details of all types of loans advanced by the Pudukkottai Central Co-operative Bank.

<i>Co-operative year.</i>	<i>Cultivation loan.</i>	<i>Other loans.</i>	<i>Total.</i>
(1)	(2)	(3)	(4)
	RS.	RS.	RS.
1920-21 .. ..	..	..	9,250
1924-25 .. ..	..	..	71,565
1929-30 .. ..	..	..	95,524
1934-35 .. ..	..	..	74,941
1939-40 .. ..	..	..	98,467
1946-47 .. ..	..	..	14,49,916
1949-50 .. ..	..	..	8,77,678
1954-55 .. ..	..	..	7,06,960
1959-60 .. ..	..	..	29,39,034
1964-65	70,51,993	1,18,795	71,70,788
1969-70	52,97,367	20,43,428	73,40,795
1970-71	71,97,887	19,64,098	91,61,985
1971-72	1,12,30,240	19,56,188	1,31,86,428
1972-73	1,39,11,602	16,60,023	1,55,71,625
1973-74	1,71,05,766	1,22,74,878	2,93,80,644
1974-75	1,95,80,664	1,82,96,861	3,78,77,525

The Pudukkottai Central Co-operative Bank provides short and medium term cultivation credit to the agriculturists through the primary agricultural credit societies numbering 138 in the district. The 11 Land Development Banks in the district advance long term

loans for the purpose of sinking of wells, installation of pumpsets, sinking of deep bore wells, reclamation of lands, etc., The three Co-operative Urban Banks in the district advance loans to the people in urban areas.

The loans outstanding at the end of the co-operative year 1974-75 (i.e., as on 30th June 1975) in respect of co-operatives amounted to Rs. 775 lakhs as detailed below :—

	RUPEES IN LAKHS.
1. Pudukkottai Central Co-operative Bank..	393
2. 11 Primary Land Development Banks ..	358
3. 3 Co-operative Urban Banks	24
Total ..	<hr/> 775 <hr/>

The role of commercial banks in the sphere of agricultural finance is not quite significant. The agricultural loans issued by them and outstanding amounted to Rs. 40 lakhs.

During the year 1975-76, the Pudukkottai Central Co-operative Bank Limited has programmed to issue agricultural loans to the extent of Rs. 400 lakhs including Rs. 300 lakhs for cultivation purposes. The Primary Land Development Banks and Co-operative Urban Banks have programmed to issue loans to the tune of Rs. 90 lakhs and Rs. 23 lakhs respectively.

Thus the co-operatives are playing a major role in agricultural production. The following co-operative institutions are functioning in Pudukkottai district catering to the agricultural credit requirements:—

(1) Pudukkottai Central Co-operative Bank Limited, Pudukkottai.

(2) The Pudukkottai Central Co-operative Bank branches at Alangudi, Karambakkudi, Aranthangi, Avadayarkoil, Gandharvakottai, Keeranur, Viralimalai, Ulundur, Arimalam and Ponnammara-vati.

(3) 138 agricultural credit societies affiliated with the bank functioning throughout the district.

(4) The Pudukkottai Co-operative Town Bank Limited, Pudukkottai.

(5) Brahadambal Co-operative Urban Bank Limited, Pudukkottai.

(6) Arantangi Co-operative Urban Bank Limited, Arantangi.

(7) 11 Co-operative Land Development Banks at Pudukkottai, Gandharvakottai, Karambakkudi, Arantangi, Avadayarkoil, Arimalam, Ponnamaravati, Tirumayam, Viralimalai, Annavasal and Keeranur.

Altogether, there are 163 officers of co-operative banks involved in providing the agricultural credit in Pudukkottai district in an organised manner. In this way, the co-operatives have contributed to a large extent in the production of agriculture and other economic development of the district.

There are four branches of the State Bank of India in Pudukkottai district as detailed below :—

Pudukkottai—opened on 26th November 1956.

Arantangi—opened on 26th April 1965.

Tirumayam—opened on 26th October 1965.

Alangudi—opened on 26th May 1970.

They have handled business during the year from 1972 to 1974 as described below :—

Year	Total deposits.	Total advances.	(RS. IN THOUSANDS).		
			Advances to		
			Small scale industries.	Small Business finance.	Agriculture.
(1)	(2)	(3)	(4)	(5)	(6)
1972 ..	5,321	2,384	461	134	519
1973 ..	7,068	3,892	432	159	1,503
1974 ..	10,252	5,402	631	282	1,810

Despite the assistance extended through various financial institutions, retrieving the myriads of our rural labourers and artisans from the yokes of indebtedness has not become an accomplished task, and these efforts have to be supplemented by several legislative measures. K. Nagarajan writes :

“ Rural indebtedness was a chronic feature of village economy. The peasantry were steeped in debt and relief was an urgent necessity. Before merger, there was the rule of *damudupat*, by which re-payment of twice the amount of the debt borrowed, by way of interest or principal or both, discharged the debt. In Pudukkottai, before merger, there was a Regulation on the lines of the Madras Agriculturists' Relief Act, Act IV of 1938, but that did not go far enough. Later on, legislation was promoted to meet the rapidly worsening situation. It was not as if the agriculturist alone was in need of relief. There were others, the landless poor, who were in equally bad case. There was also the small income group who found it difficult to make ends meet and had to borrow at usurious rates of interest. The documents of debt, however, recited rates of interest far below what had been agreed upon, and the excess interest was actually taken in advance by the lender from out of the principal amount agreed to be lent and recited in the document of debt. And creditors rarely agreed to any abatement of interest. The legislature intervened and passed enactments, declaring moratoria from time to time, which barred actions being taken in the law courts. They afforded a little breathing-space to the debtors.”

Act XXI of 1972 was passed to give relief to cultivating tenants, whose rent was in arrears on 30th June 1971. It provided that, if the tenants paid the rent for the current year (from 1st July 1972) the arrears would be wiped out.

Then low income groups, it was felt, needed relief as urgently as did the agriculturists. Labourers, wage-earners and Government servants on the lower salary levels had been badly hit. Debt Relief Act XXXVIII of 1972 was then passed to provide relief. In respect of debts incurred before the 1st March 1972, if a debtor had paid twice the amount borrowed, by way of interest or towards principal or both, the debt stood discharged. In respect of usufructuary mortgages executed before 1st March 1972, thirty years' possession

of the mortgaged property by the mortgagee discharged the mortgage and the owner (mortgagor) was entitled to recovery of possession. If the mortgagee had been in possession for a less number of years, payment of a proportionate amount discharged the mortgage and the mortgagor could recover. Also, mortgagors could redeem the property mortgaged though it had been given for a specified period and the said period had not expired. And there were provisions in regard to detail and these smoothed the path of the debtor (mortgagor). Nine per cent per annum was fixed as the maximum rate of interest payable on any debt incurred on or after the 1st March 1972.

Act VIII of 1973, amended Act IV of 1938 so as to entitle debtors to relief though they might happen to own land in a municipal or a cantonment area which, before the amendment, disentitled them to relief. It also provided that all interest accrued before 1st March 1972 shall stand wiped out. All amounts paid, whether as interest or principal were to go in reduction of the principal.

Before the amendment mortgagors of house property alone situate in a municipal or cantonment area or in a panchayat were under a disability. They could not claim scaling down but they could after the amendment. Another disability also was removed. Debtors could, after the amendment, claim the relief of scaling down, even in the case of women-creditors who owned property worth less than six thousand rupees.

Act XLVIII of 1975 afforded a breathing space to debtors by declaring a moratorium for one year, that is, up to the 16th January 1976, which meant that debtors could not be proceeded against at law.

Four Ordinances were passed which were subsequently enacted as Acts XV, XVI, XVII and XVIII of 1976.

(1) The Tamil Nadu Indebted Agriculturists (Temporary Relief) Act, Act XV of 1976.

(2) The Tamil Nadu Indebted Persons (Temporary Relief) Act, Act XVI of 1976.

(3) The Tamil Nadu Indebted Agriculturists and Indebted Persons (Special Provisions) Act, Act XVII of 1976; and

(4) The Tamil Nadu Cultivating Tenants Protection (Amending Act), Act XVIII of 1976.

Acts (1) and (2) barred the filing of suits of applications to execute decrees for one year from 15th January 1976.

No. (3) above provided that no interest shall accrue during the period from 22nd July 1975, to 15th January 1976, in the case of agriculturists and indebted persons (as defined in Act 16/76) but that interest would accrue on debts incurred after the 22nd July 1975. It also similarly, amended the Tamil Nadu Pawn-Brokers' Act, 1943 in respect of interest and also prohibited the sale of pledged articles during the period 22nd July 1975 to 15th January 1977.

No. (4) above provided that any person wishing to resume land should apply to the Revenue Divisional Officer who would allow resumption on equitable terms, such as re-imbursing the party in possession for his labour in respect of standing crops.

Act 31/76 wipes out debts due from small farmers and rural artisans.

TRADE AND COMMERCE.

In ordinary parlance, 'trade' and 'commerce' are used as synonyms. But the former should be, strictly speaking, taken to refer to buying and selling goods only, whereas the latter is a more comprehensive term and includes not only an exchange or transfer of goods but also all other activities which make for free flow of goods and services between producers and consumers. These activities can be termed 'aids to trade'. The term 'commerce' thus includes 'trade' and 'aids to trade' such as banking, insurance, storing, transport, advertisement. Commerce has been defined as "the distribution and exchange of all surplus goods produced in the fields, mines, seas, forests, and factories of the earth so that they reach the final consumer in the right place in the right condition at the right time, in the right quantity and at the right price".

The growth of Commercial Enterprise in Pudukkottai.—The people of Tamil Nadu have shown great commercial enterprise from very ancient times. It is said that the Tamils had a colony, at Babylon even in seventh and sixth centuries before Christ.

T. K. Venkataraman points out¹ “there was trade from ancient times with Chaldaea and Egypt on one side and with the Malayan Archipelago and China on the other side. The country possessed goods in high demand like pepper and other spices, pearls, precious stones like beryls, conch-shells, ivory and cotton cloth. When Egypt became a Roman province, the trade with the West further increased. The author of the *Periplus* (about 81 A.D.) gives details regarding the ports of South India. Ptolemy (about 150 A.D.) shows more accurate geographical knowledge of South India than of North India. According to the *Periplus*, ‘the chief exports were pearls, ivory, spices and precious stones, and imports were glass, figured textiles, metals like copper and lead, coral, wines and precious metals like gold and silver’. Roman writers like Pliny refer to the enormous drain of gold to India from Rome. Pepper and other spices fetched an enormous price in the markets of Europe. Tamil poems speak of Yavana wines, lamps and vases and refer to the ‘beautiful large ships of the Yavanas’. The chief ports mentioned on the west are Muziris (which has been identified by Dr. Burnell with Cranganore and which was then called Musiri), Bakara (Vaikkari) in Travancore, and Neelkynda (Kottayam). On the east, there were ports like Korkai which was the earlier port, till owing to changes in the contour of the coast it decayed and Kayal became the chief port. Kayal was still flourishing in the time of Marco Polo”.

The *Pattinappalai* gives an account of the foreign trade of South India. Nilakanta Sastri points out : “Large quantities of Roman coins found in the interior of the Tamil land attest the extent of trade, the presence of Roman settlers in the Tamil country and the periods of the rise and decay of this active commerce. Casual statements made by the classical authors, and more decidedly, the evidence of the early Chinese annals prove that along the sea route from the Far-East to the West, India acted as an intermediary

1. *A Manual of Indian History*—Volume I, (1953).

for many generations". In 1898, 501 Roman gold coins were found at Karukkakkurichi, which speak of the Pudukkottai's share of the foreign trade in ancient times.

But the Pudukkottai area has not had very much to give. Being dependent on the surrounding districts even for the supply of its necessities, its exports have been inappreciable. One of Pudukkottai's former Diwans Vedantacharlu, gives¹ the following account of trade in Pudukkottai: "The chief occupation of the people is of course agriculture, wet and dry cultivation, more the latter owing to the *kadarambam* character of the country. Groundnut cultivation is carried on to a large extent in Karambakkudi firka whence groundnut is sent to the ports in the Tanjore district for exportation to foreign parts. The chief articles of import (so to say) are paddy and sea-salt which are brought into the capital in large quantities from the adjoining parts of Trichinopoly and Tanjore districts every Friday for being sold in the weekly market on that day. The total transactions on every market day amount to Rs. 50,000 on an average. There are also weekly fairs held in several other parts of the State".

The trade and commerce of Pudukkottai district remains much the same today as it did when Vedantacharlu wrote.

Agricultural Marketing today.—Paddy, groundnut and cashew-nut are the surplus agricultural commodities entering business transactions in a fairly large measure. To a lesser extent, are chillies and millets. Paddy-marketing is regulated by the procurement and distribution policy adopted from time to time by the State Government. Nominated agents purchase paddy in the notified areas at stipulated prices and deliver them to the authorised mills for processing and delivery to the Civil Supplies Department. This department is responsible for its distribution to consumers in accordance with the Government policy.

Alangudi has developed as one of the reputed centres for groundnut marketing. During harvest seasons, groundnut farmers

¹ Report on the Administration of Pudukkottai (1895-96).

invariably visit Alangudi centre to assess the market situation. The one other market centre is Pattukkottai in Thanjavur district but most of the farmers prefer to transact business at Alangudi.

Groundnut is marketed only in kernel form and is to be decorticated before sale. Harvested groundnut pods are cleaned and dried in the open then and there, since if they are not sufficiently dried they are liable to ferment, affecting the quality of oil. Normally they are dried for two to three days and transported to the decorticating centres by the ubiquitous bullock cart.

At Alangudi there are 23 decorticating mills of different capacities—all driven by electric power supplemented by oil engines. Based on the traditional relationship that has developed over years and sometimes over generations between the farmer and miller, decortication is invariably done in one and the same mill. The pods, as and when they are received at the mill, are decorticated in the order of priority of delivery. After decortication of a particular lot of produce is over, it is gathered and heaped in the open, when it is ready for inspection and purchase by merchants. The decorticating charge is Rs. 3.00 per bag of 80 kg. of kernels.

A system of open auction is followed in the mode of call. Merchants mostly from Virudhunagar, Salem, Namakkal, Tiruchengode, Singampunari, Erode, Bhavani, Dindigul, Theni, Tindivanam, Panruti and Madras visit Alangudi twice in a year. The summer produce starts arriving in the market from April and continuous up to June. The winter produce arrives from September to November. The transactions reach their maximum volume during the summer period. The auction sales commence at 7.30 in the morning. Merchants move in batches from one decorticating mill to another, where the produce is kept ready for auction, inspecting the produce for moisture, quality and general appearance. At one time, auction sale is conducted only at one centre. The decorticating mill owner or his agent conducts the auction sale personally. The process is rapid. Bidding time permits only a limited and few merchants to participate in the auction process. The farmer is left with the option to dispose of his produce at the highest amount bid or wait for the next auction in the coming day.

Payment for the produce is not immediate. The miller pays only a nominal amount to the farmer to meet the expenses of transport and other incidentals. Normally a few hundred rupees are paid on the date of the transaction with a promise to settle the final accounts within a course of seven to ten days. In this process there is no direct contact whatever between the producer and the merchant buying the kernel. The decortivating miller serves as intermediary conducting the sale and settling the final account. The ultimate responsibility for settling the account rests on the miller. He deals directly with the merchants, and makes the final payment to the farmer, a week or ten days later. The cash bill gives an account of the volume and value of the kernel relating to the farmer. Deductions are made for decortication at Rs. 3 per 80 kg. of outturn of kernel, and final payments made to the farmer. In case the final account is not settled within a month, a notional interest of 12 to 18 per cent is made on the outstandings.

Decortivating mills provide both physical and financial assistance to their client farmers. Physical facilities include lodging arrangements for men and cattle within the mill premises. If for reasons of high moisture content the kernel is not bidded, threshing floor facilities for drying purposes are made available free of charge. Gunny bags for bagging groundnut pods are invariably supplied to all their client farmers by the millers immediately when harvest commences.

The millers also extend credit facilities to farmers. Normally at the commencement of sowing and harvest seasons millers and their agents visit villages and extend credit facilities to the needy farmers on the understanding that the produce will be delivered to the miller only for decortication, which in turn implies sale also. The prevailing market rate of interest is charged for amounts given at the beginning of the season, while amounts given for meeting harvest and other incidentals are considered as temporary advances only.

Ground nut market and marketing systems are well organised though biased towards the interests of the intermediaries rather than the primary producers.

There is no organised market for cashewnut. The produce is gathered in instalments and when sufficient quantities are accumulated they are sold in shandies and/or to petty traders who go about villages procuring cashewnut. Similar is the case with chillies.

There are 28 recognised weekly shandies in the district.

<i>Name of Panchayat Union.</i>	<i>Name of Shandy.</i>	<i>Days.</i>	<i>Commodity.</i>
(1)	(2)	(3)	(4)
1. Arimalam ..	.. Arimalam ..	Monday	.. Paddy, Cholan and groceries.
2. Arimalam ..	.. Royavaram-Pudupatti.	Wednesday	.. Vegetables and fish.
3. Arimalam ..	.. Kadiapatti ..	Tuesday	.. Vegetables and fish.
4. Arimalam ..	.. Embal ..	Sunday	.. Vegetables and fish.
5. Arimalam ..	.. Seppavayal ..	Monday	.. Vegetables and minor millets.
6. Arimalam ..	.. Thittaiyayal ..	Monday	.. Vegetables and minor millets.
7. Arimalam ..	.. Madagam ..	Monday	.. Vegetables and minor millets.
8. Arimalam ..	.. Thanikkadu ..	Monday	.. Vegetables and minor millets.
9. Arimalam ..	.. Enagam ..	Sunday	.. Vegetables and minor millets.
10. Arimalam ..	.. Thiruvakudi ..	Tuesday	.. Vegetables and minor millets.
11. Arimalam ..	.. Arasur ..	Tuesday	.. Vegetables and minor millets.
12. Karambakkudi ..	.. Karambakkudi ..	Wednesday	.. Vegetables and fish.
13. Kunnandarkovil ..	.. Keeranur ..	Monday	.. Vegetables and minor millets.
14. Kunnandarkovil ..	.. Andakulam ..	Saturday	.. Vegetables and minor millets.
15. Ponnamaravati ..	.. Ponnamaravati.	Tuesday Saturday.	.. Vegetables, minor millets, fish and handicrafts products.
16. Ponnamaravati ..	.. Koniur ..	Monday	.. Vegetables, Poultry, turmeric.
17. Tirunayana ..	.. Virasalai ..	Sunday	.. Vegetables, Poultry, turmeric.

<i>Name of Panchayat Union.</i>	<i>Name of Shandy.</i>	<i>Days.</i>	<i>Commodity.</i>
(1)	(2)	(3)	(4)
18. Tirumayam ..	Kulipirai ..	Thursday	.. Vegetables, Poultry, turmeric.
19. Tirumayam ..	Sonappattu ..	Tuesday	.. Vegetables, Poultry, turmeric
20. Tirumayam ..	Caliyemangalam ..	Tuesday	.. Vegetables and minor millets.
21. Tirumayam ..	Melathaniam ..	Sunday	.. Vegetables and minor millets.
22. Tirumayam ..	Pudumilaivayal ..	Thursday	.. Vegetables and minor millets.
23. Tiruvarangulam ..	Pudukkottai ..	Friday	.. Farm commodities, sheep, pots, cattle.
24. Tiruvarangulam ..	Therkutheru ..	Monday	.. Farm commodities, sheep, pots, cattle.
25. Tiruvarangulam ..	Varapur ..	Tuesday	.. Farm commodities, sheep, pots, cattle.
26. Tiruvarangulam ..	Alangudi ..	Thursday	.. Farm commodities, sheep, pots, cattle.
27. Arantangi ..	Arantangi ..	Tuesday	.. Livestock and farm commodities and dry fish
28. Arantangi ..	Silattur ..	Saturday	.. Vegetables and minor millets.

Regulated Markets.—The regulated market in the district continues to be a part of the Tiruchirappalli Market Committee to which it was affiliated before the formation of the district. For Arantangi and other places transferred from Thanjavur district, the regulated markets continue to work under the Thanjavur Market Committee.

There are regulated markets at Pudukkottai, Alangudi, Kiranur, Gandharvakkottai and Arantangi. The notified crops are as follows :

1. Pudukkottai—Paddy, groundnut, chillies and gingelly.
2. Alangudi —Paddy, groundnut, chillies, cashewnut.
3. Kiranur —Paddy and groundnut.
4. Gandharvakkottai—Paddy, groundnut, cashewnut and redgram.
5. Arantangi —Paddy, groundnut, and coconut.

Regulated markets have just commenced their activity of collecting cess.

Non-Agricultural Commerce.—The Pudukkottai commercial district was formed on 18th January 1974. This includes the entire Pudukkottai district and also the Manapparai taluk of the Tiruchirappalli district. The revenue realised from the Pudukkottai district, by way of commercial taxes during the year 1974-75 was Rs. 87.26 lakhs. This is 33 per cent more than that realised during the financial year 1973-74.

Pudukkottai district falls within the Tiruchirappalli commercial taxes division. Its comparative commercial significance can be gleaned from the following statement. Actual receipts for 1974-75 in Tiruchirappalli division:—

<i>Name of the Commercial Tax District.</i>					<i>Actual receipt for 1974-75. (RS. IN LAKHS.)</i>
Tiruchirappalli (Town)	..	..	..	..	591.75
Tiruchirappalli (Rural)	..	..	..	..	125.60
Thanjavur	..	..	..	..	167.40
Kumbakonam	..	..	..	..	234.28
South Arcot	..	..	..	..	443.50
North Arcot	..	..	..	..	479.29
Pudukkottai	..	..	..	..	*97.26
					<hr/> 2,139.08 <hr/>

* (Including Manapparai taluk in Tiruchirappalli district.)

In the entire Tiruchirappalli division, comprising seven commercial taxes districts, the total revenue derived under all the commercial taxes Acts, for the year 1974-75, is Rs. 21.39 crores, whereas the revenue realised from the Pudukkottai revenue district is only Rs. 97.26 lakhs.

The following figures¹ show the number of persons engaged at present in trade and commerce in this areas : —

(1)	(2)	Persons in Trade and Commerce.		
		Total Population.	Males.	Females. Total.
Arantangi (Rural)	1,86,051	2,985	123	3,108
Arantangi (Urban)	16,350	1,582	48	1,630
Kulattur (Rural)	2,07,682	2,323	125	2,448
Iluppur (Urban)	7,222	432	13	445
Alangudi (Rural)	1,71,223	1,835	79	1,914
Alangudi (Urban)	6,728	645	21	666
Pudukkottai (Town)	66,384	7,250	460	7,710
Tirumayam (Rural)	1,79,148	2,845	198	3,043
Ponnamaravati (Urban)	10,764	860	15	875
Kadiapatti (Urban)	4,250	161	18	179
P. Alangapurj (Urban)	3,281	154	16	170
	8,59,083	21,072	1,116	22,188

(Census of India 1971.)

It may be seen that only 2.6 percentage of the total population is engaged in trade and commerce in this area. It may, however, be reasonably hoped that with the gradually widening commercial activities of this area, the volume of the district's participation will increase.

1. These show the position before the formation of the district. Totally, however they cover almost the entire portion of the present district. Moreover the figures also include those engaged in transport, storage and communication, which are basically aids to trade.

CHAPTER VII—COMMUNICATIONS.

Kodumbalur, the site of a beautiful temple-ruin in the district, is mentioned in the old Tamil epic *Silappadikaram* as lying on the desert track from Uraiyur to Alagarmalai. An older reference to routes can hardly be imagined. This road has, over time, been joined by an intricate network of communication 'arteries' through which the district's social, commercial and administrative life runs.

Locomotion.—N. Subramanian observes in *Sangam Polity* (1966): "From the earliest times the pearl of the Pandyan kingdom had been a much desired article in the kingdoms of the Gangetic valley. The *Artha Sastra*¹ of Kautilya mentions some commodities as coming from the land of the Pandyas : (1) *Pandyakavataham*, the name of a kind of a pearl ; and (2) *Maduram*, a kind of cotton fabric from Madurai."

The numerous travelogues which have been recorded by many Indian and foreign authors reveal that effective communication of ideas as well as articles continued all along in our country although compared with the present day the task of traversing the country should have then been tedious and time consuming.

Roads.— This ancient movement of goods would not have been possible but for some rudimentary roads connecting the Tamil country with the rest of India.

Reference has been made in Chapter I and II to the description in Ilango's *Silappadikaram*² of a 'route' from Uraiyur to Madurai.

It is clear, therefore, that the Tamil land including the Pudukkottai tract were served from early times by roads, few, perhaps, but well-defined. The quality of the roads is always closely related to the type of transport in vogue. The old routes were suited for pedestrian and bullock cart traffic alone and for armies moving on foot and horse back.

1. Ascribed to the fourth century B.C.

2. Ascribed to about A.D. 500.

Referring to the general condition in South India from the sixth to the seventeenth century, K. A. Neelakanta Sastri says¹: "Roads are mentioned in inscriptions, from all parts of the country, and to maintain them, great or small, in good repair was part of the duty of local authorities, the villagers being generally expected to give their labour free. The breadth of a main road was about twenty-four feet; but there were also tracks only slightly better than foot-paths, which are apparently impassable for wheeled traffic..... Up-country, merchandise was carried in carts, on the heads or shoulders of men (Kavadis) and on the backs of animals. The roads were not always safe and brigandage increased in unsettled times....." But due to the limited purposes of internal trade and pilgrimage, the roads seem not to have received much attention in the mediaeval period.

T. G. P. Spear observes in *The Oxford History of India*²: "The solution of the transport problem is the key to modern India's economic development. So long as that problem was unsolved mere size defeated most schemes of development. You cannot feed large-scale industry or distribute mass produced product, by bullock wagons or hitch modern industry to acamel. The (East India Company) government's first enabling measure was therefore to improve the means of transport. Steam navigation was introduced on the rivers. The next measure was the provision of good roads. In 1839 the Grant Trunk Road from Calcutta to Delhi was commenced and this was followed by links between the major cities of British India. It was now possible for goods to be moved but there was still only the bullock wagon to move them."

"Even then it is noted in the *Manual of the Administration of the Madras Presidency* (1885) "no systematic progress was made for many years, though in certain districts the energy of individual officers secured results within the limits of their charges...." This "systematic progress" came to Pudukkottai during particularly energetic period of Sir A. Sashiah Sastri's administration (1878-1894).

1 Page 318 of *A History of South India* (1955).

2 Third Edition (1964), Part III.

The roads to Madurai, Tiruchirappalli and Thanjavur were of importance for Pudukkottai. Until the 1st October 1923, Collectors of one of these three districts exercised political control over this State. During drought periods paddy and rice had to be brought by road from Thanjavur. After Sashiah Sastri took over, regular allotments were made to this branch of Public Works every year. Providing tunnels and metalling were urgently taken up.

The condition of these three roads in 1882-83 is explained by Sashiah Sastri: "The only remaining tunnel on the Trichinapolly road over the Kolattoor Kalingulah surplus channel, to which reference was made in the previous report as being under construction, was completed in the year under report. This road or rather the 24 miles of it which lie within the limits of the State, is now completely provided with tunnels throughout its length and fully remetalled and traversable in all seasons by horse carriages as well as carts.

The Tanjore road, that is the 19 miles of it which are within this State to the south of Gundrakotta, has also been now fully provided with tunnels and metalled with the exception of the three miles nearest Pudukkotta, which will be finished shortly.

On the Madura road, 26 tunnels more were constructed this year making a total of 31, including the 5 completed the year previous." He adds. "When I took charge of the administration... their condition was a bye-word and every rainy season the roads used to be strewn with wrecks of broken down carts. This state of affairs is no longer to be seen and when the Madura road is taken up and metalled as the Trichinopoly and Tanjore road have been, the Pudukkotta State may, in respect of its roads, hold up its head against any British district...". Never after this had Pudukkottai the necessity to lower its head as regards its roads. A considerable portion of the amount spent on Public Works, was diverted to the maintenance and formation of the roads. The following figures will reveal the attention paid to the roads by the State.

<i>Year.</i>	<i>Amount spent on Public Works.</i>	<i>Amount spent on roads.</i>	<i>Percentage.</i>
(1)	(2)	(3)	(4)
	RS.	RS.	
1898-99	1,12,870	32,125	28.4
1899-1900	1,14,239	30,447	26.6
1900-01	1,09,528	35,320	32.2
1905-06	2,70,230	78,056	28.9
1910-11	2,70,427	63,368	23.4
1915-16	6,56,330	97,286	14.8
1920-21	4,39,311	1,54,073	35.1
1925-26	3,96,815	1,62,342	40.9
1930-31	5,44,784	1,42,110	26.1
1935-36	3,82,515	1,09,831	28.7
1940-41	3,13,781	1,15,045	36.6
1945-46	3,08,679	1,53,797	49.8

For some period the British portion of the Tiruchirapalli road was also under the maintenance of the State. We find that by the end of 1901-02, this portion of the road was handed back to the district Board, "which chose to take it back in preference to paying the Darbar as claimed by it, the actual charges of maintaining it under the stress of heavy traffic which the Boer camp located closeby, stimulated".

In respect of 1902-03 the Darbar said, "The main roads in the State are all metalled and kept in excellent condition and there is, if anything, a plethora of them. The town is connected by main roads with Trichinopally, Tanjore, Madurai, Pattukkottai and Devakottai and has a number of cross roads. No more are wanted just now and the Darbar will construct what feeder roads may found necessary in case the long expected and much hoped for railway passes through Pudukkottai." For the next year, it was stated: "The main roads in the State are metalled and no expense is grudged to keep them in excellent condition. The internal and

external communications of the town are all that could be desired and village roads are being constantly opened to meet the wishes of the people. The State now maintains 210 miles of metalled road, 90 miles of unmetalled road and 250 miles of village track. . . . this is as much as can be maintained by a State which does not collect any special cess of the nature of land cess levied in the British Districts, especially when it is remembered that, if ever a railway passes through Pudukkottai, feeder roads will have to be constructed without loss of time or regard for money".

A separate division was created in 1906-07, in the State Public Works Department for the road maintenance.

The total mileage of roads maintained in Pudukkottai in some of the years before merger, was, as follows :

Year.	Total mileage of roads.	
	Metalled.	Unmetalled.
1909-10 ..	199	101
1919-20 ..	311	70
1929-30 ..	415	71
1935-36 ..	455	92
1945-46 ..	485	70

Public participation in the formation of roads was also appreciable. In the year 1920-21, not less than 11 roads were being laid out at their cost. The Ponnamaravati-Poolankurichi road, Poolankurichi-Kanjathumalai road and Ponnamaravati-Kattayandipatti road were all completed in 1922-23 by private enterprises. These private efforts have also contributed considerably to the road development in the State. It was in this year that the bridge across the Vellaru on the Madurai road was completed and opened for traffic.

The lattice girder bridge across the Periyaru on the Pudukkottai-Karambakkudi road was executed in 1923-24. It was completed in the next year, at a cost of Rs. 67,043. This was named 'Sri Vijaya Raghunatha Bridge' and opened for traffic on 4th June 1925.

In 1924-25 the construction of the roads from (i) Viralimalai to Manapparai ; (ii) Iluppur to Tiruchirappalli; and (iii) Ambukkovi to Raghunathapuram was started to provide labour for coolies. The construction of a bridge across the Manimuthar river in the Ponnamaravati-Vendanpatti road was completed in this year.

The roads from 10/3 of the Tiruchirappalli road to Uppiliakudi, connecting Narttamalai railway station and from Nangupatti to Keeranur railway station were formed in 1927-28.

The Pudukkottai State also received subventions from the Road Development Fund of the Government of India, during some of the years. In 1934-35, it received a sum of Rs. 11,858. In 1936-37, a sum of Rs. 24,550 was received as subvention, which was applied to the Palaiyur bridge (over the Vellaru in Palaiyur vattam). Then, it was the largest bridge in the State consisting of 11 spans of 34 feet each. The total cost of this bridge was Rs. 42,500.

Though poor in getting rains, the heavy rains and floods have been a threat to the roads in Pudukkottai very often. The jungle streams which criss-cross the State are capable of doing enormous damage to the roads of the State, when occasionally heavy rain causes floods in them. In the year 1920-21, the bridge across the Periyaru in the Karambakkudi road and the causeways across the Vellar in the Kadayakkudi and Tirumayam roads built at very great cost, were washed away by the disastrous floods that occurred in that fasli. Similarly, due to the floods in November 1939, parts of many roads were either washed away or breached.

The following information may give a comparative idea, about the mileage of roads in the Pudukkottai State and the adjoining districts before merger.

<i>Mileage per 100 sq. miles of area.</i>						
	1935-36			1945-46		
	<i>Metalled.</i>	<i>Un-metalled.</i>	<i>Total.</i>	<i>Metalled.</i>	<i>Un-metalled.</i>	<i>Total.</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Pudukkottai State.	38.6	7.8	46.4	41.1	6.0	47.1
Thanjavur District.	16.5	54.6	71.1	20.7	58.8	79.5
Ramanathapuram District.	12.9	3.8	16.7	18.4	3.9	22.3
Tiruchirappalli District.	21.9	7.9	29.8	21.2	3.8	25.0
Madurai District.	17.8	8.8	26.6	26.7	*	*

** Not computed.*

It may be seen that the Pudukkottai State commanded a much better position than all the adjoining districts except the Thanjavur district, where the length of the unmetalled village tracks was considerable.

With the advent of the Highways Department and Panchayat Unions the roads in the district have been improved to a great extent. While the main roads have been transferred to the maintenance of the Highways Department the formation and maintenance of the link-roads have been left to the Panchayat Unions. Even remote villages have road-facilities now. As on 31st March 1975 (apart from the Highways roads) the length of roads under the maintenance of the Panchayats and Panchayat Unions, in the Pudukkottai district was 2450 miles. Out of this, 924 miles have been gravelled, metalled and black topped. The length of the roads in the State in 1945-46 was only 555

miles. Even though this is exclusive of the Arantangi taluk and other newly included villages, the marked improvement is easily discernible. The inclusion of the formation and maintenance of link-roads in the village works programme, has given an enormous spur to this aspect of rural development. This scheme which also calls for the public's contribution, has greatly helped to stimulate a sense of self-help among the rural population. However, in respect of link-roads exclusively meant for the benefit of harijans, fishermen, and other backward communities, the public's contribution is waived, the party being compensated by the Harijan Welfare Department. The allotment of funds amongst the Panchayat Unions was being made on a pro-rata basis until the year 1974-75, when it was decided to fix the amount of allotment to each Panchayat and Panchayat Union with reference to their needs. More over a crash scheme for the formation of fair weather gravelled roads to villages which are not served by any kind of roads at present, has been launched. In view of this, no new formation of roads is to be taken up under the Link Roads Programme, and the amount allotted could be utilised for the maintenance of already existing roads.

The total length of the roads in the charge of the Government's Highways and Rural Works Department in Pudukkottai district (as on 31st March 1975) is 1,197 kms. classified as follows:—

State Highways	..	..	..	78	kms.
Major District Roads	..	..		419	„
Other District Roads	..	..		700	„
Total	..	..		1,197	„

No National Highway runs through the District.

The Perambalur-Manamadurai road is the only State Highway passing through it. This is an inter-district road connecting Tiruchirappalli, Thanjavur, Pudukkottai and Ramanathapuram districts. It passes through Adanakkottai, Gandharvakkottai Pudukkottai, Tirumayam and Namanasamudram.

A Highways and Rural Works Division at Pudukkottai with three regular Highways and Rural Works Sub-Divisions (2 being in Pudukkottai and the third in Arantangi) maintains Government roads in the district.

There is, besides, one Transport and Machinery Division, with one Sub-Division at Pudukkottai. There are two rural Roads sub-divisions, one at Pudukkottai and another at Arantangi.

The Department chalks out plans for road development, implements them and maintains the system as efficiently as possible subject to the resources available. In spite of financial constraints, the implementation of the 'bus route scheme', upgrading of rural roads into bus route roads, drought-prone areas programme, link roads programme and the special rural road scheme (besides regular plan activities) have contributed to a large extent to the rapid expansion of the roads net work in the district.

Constructing a submersible bridge at M. 3/8 on the Pudukkottai Embal road at a cost of Rs. 7 lakhs and a widening (to 22') cum-black-topping in the Tiruchirappalli-Viralimalai-Madurai Road at a cost of Rs. 7 lakhs are two major works recently completed.

Constructing a submersible bridge across Korayar at KM. 7/10 to 8/2 on the Viralimalai Kalamavoor road at a cost of Rs. 8 lakhs, construction of a bridge at KM. 13/6 on the Valanadu-Kalingapatti road at a cost of Rs. 5 lakhs, construction of a high level bridge at M. 22/7 of the Pattukkottai-Arantangi Road (via) Peravurani are three major works that are in progress during the year 1975-76.

A scheme sanctioned at an estimated cost of Rs. 19 crores in 1972 to link all inhabited villages with a population of 1,500 and above with all weather roads, is under implementation in a phase

plan for five years. Under this scheme the following works are being implemented in various phases:—

<i>Serial number and name of the phase.</i>	<i>Number of works taken up.</i>	<i>Length in KM. taken up for improve- ment.</i>	<i>Number of villages benefitted.</i>	
			<i>Main.</i>	<i>Inci- dental.</i>
(1)	(2)	(3)	(4)	(5)
1 First phase of Rural Roads Scheme.	4	9.74	4	18
2 Second phase of Rural Roads Scheme.	2	20.40	3	..
3 Third phase of Rural Roads Scheme.	5	20.80	5	11

Under this scheme all cross-drainage works upto '30 M linear waterway' are taken up and improved for a '70 R loading' design. After the completion of these works they will be taken over by the Highways Department for maintenance.

A scheme to connect all the inhabited villages irrespective of population with a gravelled surface road has been sanctioned in 1974 at a cost of Rs. 11.94 crores. As a first phase of the programme all roads not involving land acquisition and length not exceeding 3 Kms. were taken up. Under this first phase scheme, a total length of 228.90 Kms. were taken up for formation. As soon as these works are completed they will be handed over to the respective Panchayat Unions for maintenance.

All pathways leading to burial or cremation grounds not involving land acquisition and benefitting harijan colonies only have been taken up for formation during May 1975. In this scheme 34.50 Kms. length of pathways for harijan colonies are to be taken up for formation.

All the important roads are now managed by the Highways and Rural Works Department, with the Chief Engineer at its apex. There are two Divisional Engineers (Highways and Revenue) in Pudukkottai district with Assistant Engineers who are in-charge of sub-divisions, to work under them.

To facilitate the stay of travellers, the Highways Department and Public Works Department maintain Travellers Bungalows. The 'Roseland-Guest House' (a former residence of the Assistant Administrator of the Pudukkottai State) maintained by the Public Works Department in Pudukkottai is situated about two furlongs from the Bus Stand. Near to this is the travellers' bungalow of the Highways department. In addition to this the Pudukkottai Municipality maintains a lodge named after Satyamurthi, the late Congressman and freedom fighter, who was a native of Pudukkottai State. There are other private lodges also to cater to the needs of the ever-increasing floating population of Pudukkottai town. The improved facilities of the bus traffic and the recently acquired status of 'District Headquarters', have contributed greatly to the increase in the number of visitors to this town. With the inauguration of the district, town buses have also been introduced in the town. Now there are town-buses from Pudukkottai bus stand to Narttamalai, Nemambatti, Adanakkottai, Kumaravadi, Kulipirai, Andakulam, Keeranur, Kadiapatti, Mukonamala patti, Arimalam and Varappur. The *jutka* still survives, despite competition from cycle-rickshaws and auto-rickshaws.

Government ownership of bus transport was inaugurated in Tamil Nadu in December 1946. Its role in the organisation of passenger-traffic has been steadily increasing. With the formation of the Regional Transport Corporations, and the consequent taking over of many of the buses of private bus-companies, the role of the public sector in this direction has become more significant. Pudukkottai is served by the Cholan Roadways Corporation. There are 45 private bus companies also, out of which 21 are Pudukkottai based. Express buses now connect Pudukkottai with almost all the important towns in Tamil Nadu.

In the rural areas, the bullock-carts are still an important mode of transport. But their role is gradually diminishing in view of the increased motorised bus services, which offer more convenient and quicker transport of goods to shandies and other places. The transport of goods to distant places is done through lorries. For less urgent despatches, the railway goods service is used.

There are 375 private cars, 65 taxis, 2 auto-rickshaws, 270 lorries and 20 vans licensed in the Pudukkottai district.¹ The important lorry agencies operating in the district are: (i) T.V.S. and Sons (P) Limited, Madurai, (ii) Annamalai Roadways Limited, Pollachi, (iii) A.B.T. Parcel Services, Pollachi and (iv) Shenbakam Lorry Service, Kumbakonam.

The major goods transported from Pudukkottai is 'jelly' (granite stones). The major goods that is brought to Pudukkottai and Arantangi is paddy. The private companies or factories transport their manufactured goods, such as tobacco-products, soap and biscuits. There are separate associations for Bus Owners, Lorry Owners, Taxi Owners, and Drivers, Conductors or Cleaners.

Railways.—Spear observes :² "Railways for India had been discussed since 1844, but except for the sanction of certain experimental lines, caution and obstruction had hitherto been successful. It was said that the climate was against them, that there were no engineers to build them, that Hindus would not travel on them and that they would not pay. Dalhousie's minute of 1853 convinced the home authorities of the need and feasibility of railways and laid down the main lines of their development. He envisaged a network connecting the main internal centres with the ports and providing both for strategical needs and commercial development."

The arrival of railways in Pudukkottai was a long drawnout process. The first move was made as early as 1886. But a railway connection became a reality in Pudukkottai only in 1929. Sashiah Sastri obtained the sanction of the Political Agent in 1886 for an expenditure of Rs. 500 to undertake a preliminary survey and get the statistics needed. At this time, his aim was also limited to connecting Pudukkottai with Tiruchirappalli through a railway line. But these proposals could not be finalised in his time. The Agent, South Indian Railways, Tiruchirappalli communicated to him a copy of the letter from the Board of Directors, England, that before proceeding to a consideration of the proposal it would be necessary to obtain from the Raja an expression of his desire to continue negotiations with reference to the project. On 15th June 1886, Sashiah Sastri replied :³ "The present Raja being a minor

¹. As enumerated in 1975.

². *The Oxford History of India* (Third Edition, 1964); Part III.

³. Darbar Records, Pudukkottai.

the matter must stand over a little pending the appointment of a Regency or other form of administration for the State during his (Raja's) minority which will be done very shortly. Meanwhile, the rough survey for which an advance of Rs. 500 has been sanctioned as stated above may, I hope, be allowed to proceed".

Though Sashiah Sastri himself was subsequently appointed Diwan-Regent, the proposals came to a final shape only in November, 1897, when R. Vedantachari submitted¹ elaborate proposals for constructing a railway line from Tiruchirappalli, not only upto Pudukkottai but upto Thondi. He took up the job of substantiating his proposals enthusiastically and convincing the British about the usefulness of the project. Though the British were not decidedly against the proposal, they were extremely cautious and hesitant. The prolonged exchange of views among the various officials resulted in undue delay. The Collector of Madurai did not favour the portion of the line between Devakkottai and Thondi but proposed to carry on the line from Devakkottai via Ilayangudi to Paramakudi. The Collector of Thanjavur suggested that the line might run from Thanjavur to Pudukkottai, and so to Thondi. He, however, doubted if the traffic from Thanjavur to Pudukkottai was greater than from Tiruchirappalli. The Diwan was asked to collect road-traffic statistics, which he did. He also established a traffic-registering station at Tirumayam for one year. S. J. Mercer, who undertook the estimation of traffic-prospects, viewed that it would be advisable if the line is constructed to make a slight diversion to include Kunnakkudi. He said: "This is an important place for pilgrims and has large granite quarries. Tiles are also made in fairly large quantities. This diversion would bring Siruvayal, a village of 1,500 inhabitants, nearer a railway station and would only make the line about three miles longer." The proposal got caught in a diversity of opinions. Another reason was "a comprehensive scheme for establishing through broad-gauge railway connection between the extreme north and south of India"² The Agent, South Indian Railways wrote to the Political Agent for Pudukkottai on 9th October 1902: "So long as this project remains in its present indefinite stage, it is practically impossible to

1. Darbar Records, Pudukkottai.

2. Ibid.

express any opinion on the proposals of the Pudukkottai Darbar to initiate in conjunction with the Madurai District Board, a metre-gauge railway from Tanjore to Ramnad. If the broad gauge system is brought to Tiruchinopoly as I think it should be, it will almost certainly be continued to Pudukkottai and Ramnad or Mandapam. In this case the proposal of the Darbar are unnecessary.....“.

In 1905, the proposal was again taken up for consideration and the Political Agent enquired whether the Darbar was prepared to finance the portion of the line which would fall within their territory and if so in what manner they would propose to do it. But before long it came to be known that the South Indian Railways Company was considering whether it should not construct a line to the South via Pudukkottai. The Political Agent, therefore, wrote to the Diwan-in-Council on 14th February, 1907 that there was no apparent reason why the Darbar should accept a charge which would naturally be borne by the Company.

Again, nothing turned out. As early as 1910, the Pudukkottai Darbar had suggested¹ a railway line from Arantangi to Kanadukathan. E. W. Legh, the Political Agent, had replied : “ . . . Your suggestion for a line of railway from Arantangi to Kanadukathan will be given due consideration when the construction of the line from Trichinopoly to Ramnad has been commenced ”.

In November, 1911, the Managing Director of the South Indian Railway Board in London proposed the starting of South Indian Railway Branch Lines Company on an unguaranteed basis and the construction of the Panruti-Tiruchirappalli-Ramnad-Tenkasi line in *low grade*. On receipt of this proposal officers of the Darbar interviewed the Directors of the Company and pointed out that Tiruchirappalli-Ramnad section was superior to other sections and suggested to construct a *high grade* line in this section. The Directors felt that the construction of a high grade line will increase the expenditure involved and reduce the percentage of profit to less than 5. The Darbar secured the assent of the members to the desirability of the State having the option to take all or as many

1. Darbar Records, Pudukkottai.

shares as the State wished to the extent of the cost in State territory, either by undertaking or by an allotment of the required number of shares. The Darbar recommended to His Highness that the State could underwrite shares to the value of Rs. 10 lakhs but His Highness was pleased to sanction Rs. 5 lakhs only and this was communicated to the South Indian Railways Agent.

The State Superintendent was invited to attend a conference on railway matters at Ooty. There he stated that the State was in favour of a high grade line worked by the South Indian Railways and that in that case the State would be prepared to invest upto 20 lakhs, and that if the line was to be worked by the Branch line, the Darbar would not invest more than 5 lakhs. Again the matter came to a standstill.

In 1914, the Darbar proposed to construct the Tiruchirappalli—Pudukkottai line as a high grade one at their own cost, subject to the Branch-line terms under the rebate system in preference to the guarantee system. The First World War and the need to keep the whole project in abeyance delayed the matter. Again shoals of letters were exchanged among the authorities. In 1917, when the Railway Board raised a few questions on incidental issues, Sidney Burn, the State Superintendent observed¹: “They are I think trying to get at us piecemeal, traffic now, junction arrangement hereafter and so on. We shall put ourselves at a disadvantage if we agree. The main point is that we can't build the railway at all if it is to cost much more. Why let ourselves be worried with these small points when such is the case? It looks as though they want to assume that we are going to pay for the Railway in any case. I take it we are not going to do it unless we consider the investment on the whole *profitable*. If money is to be lost over it, let it be some other party. This might yield 4 per cent or 5 per cent if it costs 20 lakhs but if it costs 35 or 40 lakhs what it will yield? We are not able to invest 35 or 40 lakhs and even if we were we should not do it for a miserable return of 2 percent”. Thus the matter continued to tantalize the people of Pudukkottai.

This was in the year 1920. The survey for the railway line from Tiruchirappalli to Pudukkottai was not yet over. The Darbar was asked to publish a notification authorizing H.P.O. Shaughnessy.

¹ Darbar Records, Pudukkottai.

the Deputy Chief Engineer, to carry on the survey. But on 8th June 1920, the Political Agent informed² as the Darbar that the Railway Board had decided that the question of financing the Tiruchirappalli-Pudukkottai Railway should remain open until the gauge to be adopted for the Panruti-Tiruchirappalli-Ramnad Railway is settled.

But soon the spur came from the other end. On 7th September 1920, E.W. Legh, Political Agent enquired whether there was any objection on the part of the Darbar to finance the construction of the Pudukkottai-Tiruchirappalli railway and if not, whether and to what extent they were in a position to do so. Sidney Burn observed: "We may perhaps say that we have available for investment in the line about Rs. 20 lakhs but that we are not prepared to pledge ourselves to invest it until we know what the line will cost and what the return is likely to be....."

On 15th December 1924, P. Macqueen, Assistant Agent for Pudukkottai forwarded a report on "A Traffic Survey of the proposed Tiruchirappalli-Pudukkottai-Karaikudi Line" prepared by Rao Sahib S. Krishnamachari (Agent, District Traffic Superintendent, South Indian Railways). It was estimated that the cost of construction would be Rs. 1.32 lakhs per mile or Rs. 80.52 lakhs for the whole line. The Assistant Agent added that "according to the latest estimates, however, the cost of construction comes to Rs. 73,77,600- or 1.21 lakhs a mile and taking this figure, the return on capital works out to 5.9%. But by this time the Darbar had acquired a mood of 'let-it-take-its-own-time'"

The Tiruchirappalli-Pudukkottai section of the direct line of South Indian Railways was opened for traffic on 17th April 1929. The Pudukkottai - Manamadurai section was opened on 1st July 1930. The Tiruchirappalli-Manamadurai chord line forms part of the shortest route from Madras Rameswaram enroute Cylon.

The *Tanjore District Gazetteer* (1915) says: "Arantangi taluk, which formed part of British India, had the railway service much earlier. The Thanjavur District Board Railway was opened for traffic from Mayavaram to Muttupet in 1884. It was constructed with the funds provided in nearly equal proportion by the District.

¹ Darbar Records Pudukkottai.

² Ibid.

³ Ibid.

Board and by the Madras from Provincial funds. In 1901. the District Board was permitted to acquire the whole ownership of the line and to construct an extension to Arantangi. The purchase price of the Government's share, Rs. 12,35,300 with interest, was payable in 30 annual instalments, beginning from the date on which the extension to Arantangi was opened for traffic. The first length of seventeen miles to Pattukkottai was opened in October, 1902 and the rest of the extension on the last day of 1903. It was originally proposed that the line should be as far as Avadaiyarkovil ; but it was decided to be content for the present with the extension to Arantangi." This once-proposed extension of railway line to Avadaiyarkoil has not, however, materialized so far.

The short strip of Arantangi—Valarmanikkam Railway Line (in this district) which forms part of the Arantangi—Karaikudi line was opened on 30-3-1952 thereby connecting the Mayuram—Arantangi Railway line to Karaikudi and beyond in the south.

The sections of Southern Railway which lie in the Pudukkottai District are Kumaramangalam—Tirumayam on the Tiruchirappalli—Manamadurai main line and Ayingudi—Valarmanikkam on the Pattukkottai—Karaikudi branch line. The total kilometreage is given below :

Kumaramangalam—Tirumayam 55.15 Kms.

Ayingudi—Valarmanikkam 21.88 Kms.

There are 12 stations and the important traffic points are Arantangi on the Ayingudi—Valarmanikkam section and Pudukkottai on the Kumaramangalam—Tirumayam section.

The originating goods traffic on stations in this District during 1974-75 was 7,000 tons. 90% of the outward goods traffic is dealt with at Arantangi.

The principal outward traffic consists of ground-nut seeds, tamarind seeds, stone jelly, printed forms, salt and rice which are moving outside the district.

Cement, asphalt, chemical manures, waste paper, iron coils, grains and pulses are the important items of inward traffic.

The people of the Pudukkottai District make use of the stations for their travel to some extent. 6 pairs of trains inclusive of one pair of express trains running between Tiruchirappalli and Manamadurai on the main line and pairs of passenger trains running between Tiruturaipundi and Karaikudi serve the train travel needs of the public of this area.

The introduction of express services and frequent shuttle services by the railways have increased their utility to the people. A diesel coach is run from Tiruchirappalli to Karaikudi (via) Keeranur, Pudukkottai and Tirumayam daily. This is a pleasant and quick service. In passenger as well as goods traffic, the role of the railways is becoming increasingly important.

Transmission.—Post & Telegraphs and Telephones.—The origin of the postal department is described in the *Manual of the Administration of the Madras Presidency* (1885) thus : “ On the 24th July 1837 under India Act No. XVII of that year, the Government assumed by law, the exclusive right of conveying letters by post for hire but the arrangements were at first very primitive. There was not one controlling head of the department. It was managed by local Postmasters-General who were also the Postmasters of the Presidency towns, while the Collectors of the districts had charge of post offices up-country. The *dawks* consisted of a few main lines of runners connecting the principal towns in the mofussil with the seat of Government, and until 1837 it was a positive privilege to be allowed to send private letters by the Government *dawk*. Even after that date receipts were granted for every articles received for despatch and the addresses of all articles received were entered in lists. These were given to the postmen, who brought back the addressees’ signatures upon them. The addresses on all articles passing in transit through post offices were also recorded. Postage was paid in cash and varied according to distance. The English mail was received once a month. In 1854, a uniform rate of letter-postage, irrespective of distance, was introduced, postage stamps were manufactured and the whole of the post offices of India were placed under the management of a Director-General. In the same year the Postal Act of 1854 was passed repealing the Act of 1837. Its principal features still exist in the present Act XIV of 1866 which repealed it in turn. The year 1854 must therefore be looked back to as the commencement of the present arrangements. The number of post offices in the Madras Circle in 1854 was 129, it has risen in 1883-84 to 942, an increase of over 700 per cent. The total number of articles passing through the post office has risen from 5,466,672 in 1854-55 to 31, 778,552 in 1882-83. The articles carried by post up to the year 1879 consisted of letters,

newspapers, book-packets and parcels. Post cards were introduced in 1878 and that of value-payable articles in 1877. Money orders were introduced in 1880. Postal savings banks were introduced in 1882 and India postal notes in 1883. Telegraph amalgamation with the post office was also commenced at the close of 1883. Telegraphic money orders were introduced in August 1884."

Pudukkottai, however, had to face some minor impediments in the development of its postal systems till Sashia Sastri came to its rescue. A post office was opened by the Pudukkottai State in 1838, simply for the transmission of letters, packets and parcels. In 1866, an experimental post office was opened by the British Government at Pudukkottai. But as the Raja Ramachandra Tondaiman protested against this on the ground that it would lower him in public estimation, the new office was abolished. Another attempt made by the British in 1873, also failed. So, till Sashiah Sastri came, the people of Pudukkottai had to satisfy themselves with primitive postal communication. In 1879 itself, three sub-post offices were opened in the Taluk headquarters. He carefully watched the working of the system. Because of the limitations of a small State, the working of the postal department independently of the bigger British postal network was not found possible. A post office of the State was functioning as a Sub-post office of the British Post Office at Tiruchirappalli but modern advantages like money order, insurance of parcels, etc., were not available to the people of Pudukkottai. On 25th November, 1882, Sashiah Sastri wrote regarding the postal department¹. "This department which is kept up for the service of the State as well as of the public, cannot be expected to pay its way though the receipts for inland postages, are slowly improving year by year." The isolation of Pudukkottai from the British telegraph system was also another grievance of the people, noticed by Sashiah Sastri. So he managed to obtain the consent of the Raja for the establishment of a British Post Office combined with the telegraph which came into operation from the 1st April 1884. As regards the British Post Office the State had nothing else to do but taking the custody of the money sent from it daily. The telegraph line from Tiruchirappalli to Pudukkottai

¹ Paragraph 342 of the Report on the Administration of Pudukkottai 1881-82.

was subsidised by a grant of Rs. 100 per mensem for five years together with signal office accommodation'. By this system, the advantages of the modern postal system were made available to the people but the State had to incur a loss due to this dual system.

The working of this dual system was explained by a British departmental report² : "The actual postal relations with the Pudukkottai State may be briefly described as follows. The State post offices do not deal with money orders or with insured or value payable articles ; and they have not of course, any savings bank system. They undertake, however, to deliver without any additional charge, all letters, ordinary and registered, post-cards, packets and parcels that may be sent over to the State agency by our post office at Pudukkottai. The State has adopted our inland postage rates for three classes of mails when posted at its own post offices for local delivery, but charge double these rates when the articles are intended for delivery outside the limits of its own territory ; and our postage stamps are sold at all the State Post Offices to be used on locally posted articles intended for British India, but the State postal rates have to be paid in cash. We have a post office at the town of Pudukkottai itself, which is connected with Tiruchirappalli by a mail line 32 miles in length maintained solely for this purpose. This line has lately been extended through the State to certain places in Madurai district, but apart from this, we have nothing to do with management of internal posts. They are in the hands of the State, which maintains nine small post offices of its own.

The income realised from the State Post Offices amounted to Rs. 2,034 in 1890-91, while the expenditure was Rs 3809, so that the postal administration, such as it is, is carried on at a loss of some Rs. 1,700 a year. On the other hand, we receive a profit of Rs. 4,000 a year from our post Office at Pudukkottai, to which we are not in equity entitled, as we accept no charges in connection with postal arrangements in the interior."

Sashiah Sastri realised the advantages in the amalgamation of State's postal department with the Imperial Postal Department and he gave approval to them with full belief "that the measure

¹ Paragraph 267 of the Report of the Administration of Pudukkottai 1883-84.

² Tamil Nadu Archives Records, Madras.

will, as intended greatly promote the convenience of the subjects of His Highness the Raja Tondaiman Bahadur". In 1894, this amalgamation took place. The Posts and Telegraphs system happens to be the first system of day-to-day life that came to be commonly enjoyed by the people of Pudukkottai and British India.

Having made a humble beginning, Pudukkottai does not now lag behind in enjoying postal and telegraphic facilities. The Pudukkottai, Pattukkottai and Thanjavur postal divisions together share the area of the Pudukkottai district. The Pudukkottai revenue division is the Pudukkottai postal division. Arantangi taluk is in Pattukkottai postal division and Gandarvakottai firkā is in Thanjavur postal division. There are 23 sub-post offices in Alangudi and Pudukkottai taluks, 8 in Kulattur taluk, 17 in Tirumayam taluk and 14 in Arantangi taluk. Pudukkottai Head Office provides late-fee despatch facility from 17-30 to 17-45 hrs. on working days. It also has late-fee facility on Sundays. Pudukkottai has in it sub-offices and branch offices as detailed below:—

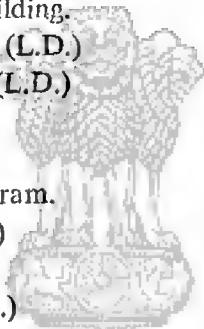
1 Higher Selection Grade Office II	..	1
2 Lower Selection Grade Sub-offices	..	2
3 I Class Sub-offices	..	6
4 II Class Sub-offices	..	10
5 III Class Sub-offices	..	18
6 E.D. Sub-offices	..	4
7 E.D. Branch Offices.	..	153

The names of the Public Call Offices in the district, the telephone exchanges, their equipped capacity and the number of working connexions in the Pudukkottai district are as follows:—

Public Call Offices—

1. Avudaya:koil (L.D.)
2. Arantangi.
3. Keelanilai.
4. Subramaniapuram (L.D.)
5. Illuppur.
6. Keeramangalam.
7. Kulipirai.

8. Nachandupatti (L.D.)
9. Rangiem (L.D.)
10. Ponnamaravati.
11. Koppanapatti.
12. Melasivapuri.
13. Pudupatti.
14. Ulagampatti (L.D.)
15. Valayapatti.
16. Pudukkottai.
17. Pudukkottai Collectorate.
18. Pudukkottai H.P.O.
19. Tirugokarnam.
20. Rajagopalapuram.
21. Railway Station (CCB).
22. Public Office Building.
23. Tiruvarankulam (L.D.)
24. Cauvery Nagar (L.D.)
25. Tirumayam.
26. Rayavaram.
27. Ramachandrapuram.
28. Arimalam (L.D.)
29. Karambakkudi.
30. Tiruvanam (L.D.)
31. Annavasal.
32. Mukkonamalaipatti.



<i>Name of Exchange.</i>					<i>Equipped capacity.</i>	<i>Working connections.</i>
Arantangi ..	..	..	..	..	90	90
Ponnaramavati ..	..	..	..	..	90	90
Pudukkottai ..	..	..	..	..	600	561
Kulipirai ..	..	..	..	..	45	32
Tirumayam ..	..	..	..	..	10	8
Rayavaram ..	..	..	..	..	45	32
Iluppur ..	..	..	..	..	25	18
Annavasal ..	..	..	..	..	25	19
Alangudi ..	..	..	..	..	90	85
Karambakkudi ..	..	..	..	..	30	27
Keeramangalam ..	..	..	..	..	45	44

The net work of telegraphs and telephones in the district, spreads over the entire district so as to be within the reach of all parts of rural areas ¹.

One of the very important modes of Communication now-a-days is the Radio. It is the most convenient system by which the whole nation, nay, the whole world, is contacted in a moment. The number of radios operating in the Pudukkottai district has steadily increased. The former Pudukkottai State had only 343 radio sets licensed in 1940-41. This number came to 575 in 1943-44. In 1946-47 the number of radios in State was detailed below:—

Broadcast receivers ..	—	601
Commercial broadcast receivers		51
Demonstration radios ..		15
Dealers' radios		17
Radio owned by Union Panchayats and Municipality.		6
Total ..		690

Now the Pudukkotti division alone has 11,960 radios. Aran tangi taluk has 3,190 radios. This marked increase in this medium of communication has a direct relationship to the growing socio-political consciousness of the people.

The Government is eager to extend television in the rural areas of the State. For this purpose a Committee on Rural Television has been constituted, to find means of implementing the programme of installation and maintenance of television sets in districts neighbouring Madras City in the first instance and throughout the State in course of time.

¹ Report of the Divisional Engineer, Telegraph, Tiruchirappalli.

CHAPTER VIII—MISCELLANEOUS OCCUPATIONS.

Pudukkottai, like every other district, has several specimens of the 'odd man out' or the man who is not engaged in the usual economic or professional vocations. These vocations, trades, hobbies, pursuits, specializations, constitute some interesting occupational profiles.

Agriculture and activities connected with farm-life engage the bulk of Pudukkottai's population. This is, of course, true of most districts in the country. In the Census of India, 1971, the 'worker' population has been divided into 9 categories :

1. Cultivation.
2. Agricultural Labour.
3. Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied activities.
4. Mining and Quarrying.
5. Manufacturing, Processing, Servicing and Repairs.
 - (a) Household Industry.
 - (b) Other than Household Industry.
6. Construction.
7. Trade and Commerce.
8. Transport, Storage and Communications.
9. Other Services.

Of these nine categories of employment, the first four Cultivation, Agricultural Labour, Livestock, Forestry, Fishing, Hunting and Plantations, Orchards and Allied activities, Mining and Quarrying, form what are called, in the standard sectorization now adopted widely, the Primary sector which engages in 'extractive' avocations. The next two, Manufacturing, Processing, Servicing, Repairs and Construction form the secondary sector which engages in 'fabricative' activities. The last three categories, Trade and Commerce, Transport, Storage and Communications, and Other Services, form the Tertiary sector which engages in 'Service' activities. The district population's sectoral break-up has been described in Chapter IV in some detail.

Among the various services comprising the Tertiary sector are certain miscellaneous or 'other' services. The district's population engaged in these is as follows :—

	<i>Other Services.</i>		<i>Total population.</i>		<i>Percentage of population engaged in Other Service to Total Population.</i>
	<i>Male.</i>	<i>Female.</i>	<i>Male.</i>	<i>Female.</i>	
(1)	(2)	(3)	(4)	(5)	(6)
District	18,464	3,495	4,71,067	4,76,284	2.32
Kulattur taluk	3,153	451	1,07,904	1,07,000	1.68
Alangudi taluk	2,510	323	81,153	80,288	1.75
Pudukkottai taluk	4,629	936	83,167	81,435	3.38
Tirumayam taluk	4,243	913	94,628	1,02,815	2.61
Arantangi taluk	3,869	872	1,04,215	1,04,746	2.23

While the terms 'miscellaneous occupations' and 'other services' would appear to denote a residual category, an examination of the nature of the services involved would show that they are no means less vital to the life of the district than those forming the Primary and Secondary sectors.

Miscellaneous occupations include the areas of public administration, education, engineering, law, medicine, domestic and personal services (e.g. car-driving, cooking, gardening, house cleaning, laundry). People employed in these avocations may not be the district's prime movers. But they are the hinges on which the former move.

Public Administration.—The headquarters of the district, Pudukkottai town, houses a number of Government Offices. According to reports, dated 31st March 1975, the number of persons employed in the State Government Offices was 6,410 ; in Central Government Offices 1,111 ; in Quasi-Government bodies, 785 and in local bodies 4,008. These figures do not include the number of engineers and others employed by the Electricity Board, Public Works Department (P.W.D.), Irrigation, Chief Engineers' Department, Housing Board, Tamil Nadu Water Supply and Drainage Board in the

district. Nor those designated as engineering contractors who have been employed by firms, and those architects and surveyors that are self-employed. To this category must be also added the masons, stone-cutters and brick layers who are engaged in construction work.

Law:—The legal profession provides employment to a number of persons in the district as Magistrates, Munsifs, Public Prosecutors, Advocates, Sharistadar and in lower cadres. The number of people occupying different posts in the judicial service was 238 (on September, 1975) including the District Judge, District Magistrates and the like. The number of persons practising law is 73.

Mukhtears * formed a class of legal practitioners of the olden days. During the times of Sir A. Sashiah Sastri, the rules regulating the qualifications, enrolment and practice of the Mukhtears in the Pudukkottai State were clearly laid down for the first time. A notification issued by the then Dewan Regent on 22nd December 1886 introduced a system of annual examination in Indian Penal Code, Code of Criminal Procedure and the Indian Evidence Act for the issue of certificates to practice as Mukhtears in the State. On payment of Rs. 10 and after obtaining the sanction of the Head of the Administration, the successful candidates in the examination were permitted to practise in the criminal courts subordinate to the Chief Court. The rules were subject to slight modifications later, but the institution of 'Mukhtears' continued and became an interesting speciality of the Pudukkottai State. It greatly helped in keeping 'legal aid' within the reach of the rich and the poor. Thiru K. Nagarajan, a Senior lawyer of Pudukkottai writes :

"There was a class of legal practitioners known as mukhtears. They held no law degree and had not received any legal education. One or two had passed the old matriculation examination and that was all. One who wished to qualify as a mukhtear had to take an

* Mukhtear or Moctiar as it is spelt in the Manual of the Administration of the Madras Presidency, Volume III (1893), is explained in it as follows :—

"Principal, independent. An attorney : not allowed in general to plead, which is the function of the vakcel."

examination on the Indian Penal Code, The Criminal Procedure Code. The Indian Evidence Act, Civil Procedure Code, Indian Contract Act, Limitation Act and Small Cause Courts Act. The question papers were set by the judges of the Chief Court who also valued the answer papers. The candidates were allowed to write their answers in Tamil, and they used technical words either in English or transliterated them in Tamil. One candidate caused some amusement by transliteration of the French phrase for previous acquittal (*autrefois acquit*) into Tamil, as it was spelt, giving full value to all the letters. His version of it was *otterfoyis akwit*.

Those who passed the examination, which almost every candidate did, were given *sanads* allowing them to practise in the Courts of the Magistrates—but not in the Sessions Court—and to conduct small cause suits upto the value of fifty rupees, before Sub-Registrars in the mufussil, who were empowered to try such suits. *Mukhtears* were not allowed to practise before the Chief Court. The mukhtears were an unqualified success. They knew their clients at close quarters, knew the way their minds moved, and spoke their brogue, while the fees they demanded were light, and well within the means of their clients, who were mostly village-folk. However there were enough feuds and factions, which helped to keep their pots boiling.

They cross examined witnesses with effect and could argue cases convincingly. They addressed arguments in Tamil or in a Tamil interlarded with technical expressions in English. Latterly, they took to addressing arguments in English, in which they were apt, and not a bit inferior to practitioners who held law degrees. They were the poor man's lawyers and a valuable asset in the life of the village.

Tamil was the language of the criminal courts and mukhtears in the old days argued only in Tamil. Once at the beginning of the century, when Law graduates had joined the Bar, a practitioner went from Pudukkottai to a village, named Pudupatti, to argue small case of the value of fifty rupees, before the Sub-Registrar. It was a case of some local sensation and a crowd had gathered to see and hear the lawyer from Pudukkottai, speak and smash the

plaintiff's case to pieces. The advocate stood in his seat and proceeded to address the Court in English. He went on for a few seconds when plaintiff's Mukhtear, Natesa Sastri, told the Sub-Registrar that, as he was ignorant of English, his learned friend might be directed to speak in Tamil. The lawyer from Pudukkottai excused himself saying that English was also the language of the Court and that he found it easier to address the court in English than in Tamil. One could say such a thing in the old days and get away with it. The Court could not refuse and Natesa Sastri subsided in his seat. The gentleman from Pudukkottai held forth for an hour and more, and made the rafters ring with his resounding declamation.

Then when it came to Natesa Sastri's turn, he addressed the Court as "*nyayadhipati Varya*" (learned judge) and proceeded to argue in Sanskrit—flawless it must have been, for he was a Sanskrit scholar. The boot was now on the other leg. The Pudukkottai gentleman objected that Sanskrit was not the language of the Court and that he himself could not follow what was said. There was something in the nature of a deadlock. The Sub-Registrar, who was shaking with merriment, like the rest of the local mukhteers, made peace between the two and requested the Pudukkottai gentleman to give the substance of his arguments in Tamil which he did. Natesa Sastri replied in Tamil and the going was unbelievably smooth afterwards.

The sequel was that on a suggestion from the Court, the two lawyers, who were very good friends, spoke to their clients and the agreed settlement was reached. The reconciliation was celebrated by a dinner at night, in which the parties, their lawyers, and the Sub-Registrar participated. Such was the spirit of the times.

The merger of Pudukkottai in the Indian Union in 1948, brought an unbelievable stroke of luck to the mukhteers. They were allowed to be enrolled as Advocates of the Madras High Court. Their day then began. They can now—and they do—practise in all Courts of Tamil Nadu Civil, Criminal and Revenue, like their brethren holding law degrees. And they are doing extremely well''

Medicine.—In 1975, There were 61 doctors and 54 nurses employed by Government in the district. Besides, there are a number of doctors doing private practice and not employed by the Government. Some of the doctors are assisted by nurses and pharmacists in their private practice.

Education.—A few hundred persons are engaged in the educational field as teachers in schools and colleges and in clerical work. According to a report from the District Educational Officer, Pudukkottai, the number of teachers working in the district in 1975 was 4,717 comprising 1,138 women and 3,579 men including a fresh appointment of over 173 teachers in 1975. These teachers instruct over a lakh and a half students.

The three colleges in this district (the training college and the two colleges for men and women) were 'manned' in 1975 by 138 teaching staff and 81 non-teaching staff. Besides those who teach, there were in that year 35 persons serving under the District Educational Officer in different capacities. The number of staff and students has increased after the formation of the district.

Domestic services.—Unskilled labour to which category, cooks, car-drivers, household servants, gardeners, etc., belong, can be classified as domestic servants. Among these groups, the car-drivers are paid more. The district has very few of these. The other groups are paid very low but are generally compensated by the provision of food and shelter.

Personal Service and Other Occupations.—Tailors, washermen, barbers and the like may be classified as persons falling under 'personal' service.

Good outfitters are found only in the town areas, where the student population is more. Quite a number of persons are also engaged in this profession in places which are in the process of becoming urbanized. A few tailors in the town stitch exclusively for men. Under these tailors, work a number of boys assistants. As the student population is higher in Pudukkottai town than elsewhere in the district, we can find more tailoring houses here than in the other parts of this district. 'Making' charges vary

from tailor to tailor, depending upon the finish. An expert tailor earns over more than Rs. 500 a month and can employ two or more junior tailors under him, depending upon his financial position and the demand. While doing the cutting himself, he would leave the 'trimmings' to his juniors.

Those known traditionally as 'barbers' in these parts of the country have played a more vital role than would be generally imagined. On important occasions like marriages and funerals in the traditional Hindu family, they have a part. Certain ceremonial duties can be done by them alone on such occasions. One of the sub-sects in this category is employed in temples to play the peria-melam (Nadaswaram) or the temple band during the daily prayer schedules and on special festival occasions. The gifted among them play the nadaswaram during marriages and festivals.

More and more of the modern barbers are now concentrating on the chief avocation of hair-dressing. With a view to earn sufficient money for their livelihood, barbers who can manage a few hundred rupees, have moved to the towns to set up shops with signboards announcing a 'Hair Dressing Saloon'. Every such saloon is capable of employing at least two persons. Sometimes, a whole family is employed. Apart from these saloons, there are the road-side barbers who attend on the impecunious at a cheaper rate. A service similar to the village's 'door service' is also in vogue in the towns but the 'door service' costs more than the saloons. In Pudukkottai district, especially in Pudukkottai town, a number of saloons can be seen. Not to be forgotten is the role of the barber women in the villages. They are the midwives for the village women, where no medical facilities are available. Their 'Mid-wifery service' is even now in existence in the remote corners of the districts where neither doctors nor qualified midwives are at hand.

The washerman is also an associate of the barber in the performance of the important ceremonial duties in Hindu households on occasions like child birth, marriages, death. But the primary duty of the washerman is, of course, to wash clothes. In villages, the washermen are generally paid in kind and in the towns, in cash. Some of the washermen set up laundries in urban areas not merely to serve the requirements of people but to earn more money. The

so-called 'dry cleaning' shops are now competing with and are outstripping the laundries. These dry cleaning shops are not owned by washermen. As more money has to be invested in this form of washing, only those who are capable of investing money in this business enter it and hence, the washing of clothes is becoming the responsibility of other men.

There are a number of other occupations which can not be brought under any heading because of their irregularity. A wage is earned by a number of women who sell vegetables from door to door. Fisher-women sell the haul in nearby markets. Petty shops can also be found attached to their huts. Few people of either sex can be found selling fruits and other articles on the streets. This is a common sight in all the towns. Hand cart pullers, jutka-walas and coolies in the market occupy a considerable portion of the group of miscellaneous workers. All these people are unskilled workers and are neither guaranteed any permanent work nor any permanent income.

The fields of commercial art, journalism and religious charitable and welfare services are some of the areas where a large number of people find employment. The 'hotel' industry is another area which not only caters to the needs of a hungry clientele but also holds out the hope of employment to a number of the district's uneducated unemployed. Recreation clubs, hire-cycle shops and cinema theatres are some other places where the uneducated jobless seek livelihood.

CHAPTER IX—ECONOMIC TRENDS.

Weather-beaten and poorly endowed, Pudukkottai has been officially declared a 'backward' district. What are the ingredients of its backwardness? What are the district's contributions to the State's economic life?

Introduction.

The Evaluation and Applied Research Department, working under the Government of Tamil Nadu's Department of Finance undertook a study of the broad economic trends in the areas comprised in the district. Its findings are given in the pages that follow.

The Pudukkottai district demonstrates that insularity among other things is one of the mutable factors responsible for a region remaining economically backward. Historical circumstances have been as much responsible for the district's backwardness as its comparatively poor resource endowment. The absence of peace, unsettled conditions of life, discontinuity in the system of public administration and frequent changes in the ruling class which characterised the period till the close of 18th century virtually negated the creation of a healthy climate conducive for the promotion of economic activities. Thereafter, the district was under princely rule for a long spell of one and a half centuries. This period no doubt witnessed peace but the area had to remain in isolation, a factor inimical to development.

The district is yet to come out of its past. Even at the time of the formation of the district the nature of its economy was still very traditional, with nearly 88 per cent of its population living in rural areas and 79 per cent of its labour force being engaged in agricultural activities. The prospects for developing this crucial sector are not very bright as this region is endowed with a not very rich soil, mal-distributed and scanty rainfall and depends mostly on an irrigation system which does not offer much scope for intensive improvements in its agricultural performance. There has been no significant diversification of economic activities in the district as industrial advancement has been constrained by a relatively undeveloped infrastructure, the lack of mineral deposits worthy of industrial exploitation and the absence of any clearcut policy for industrial promotion in the past. There have been

other inhibiting factors like low levels of income accruing to the farming community leaving no surplus for saving, the absence of an expanding market and nonexistence of a leading sector to initiate and set in motion the process of development. The formation of the district as a separate administrative entity in January, 1974, may help identification of the special characteristics and problems afflicting the region and promotion of all round development.

Economic History.—The original inhabitants of this region were Kurumbars, a set of pastoral people who owned large flocks of sheep and Vedars (hunters). Evidences are there to indicate that these people had settled in these parts at the very beginning of the Christian era. The nature of the economy should have been 'pastoral' in those days as the Kurumbars, by nature, were interested in sheeprearing. The immigration of Vellalars into this territory brought about a transformation in the economic activities, from pastoral to agricultural. Vellalars, who settled in the northern tract of river Vellaru, brought large tracts of land under cultivation. When the Tamils in South India traded with Rome, China, Malaya and the West, it is believed that Pudukkottai State had its share in the trade. This is inferred from the discovery of Roman gold coins in Karukkakurichi in 1898.

Little is known of the ancient political history of this region that was later formed into a separate State of Pudukkottai. From the inscriptions in some of the old temples in the State, it can be inferred that the Cholas of Thanjavur and Pandyas of Madurai ruled over portions of the State. But these ancient kingdoms were overthrown by the Rajas of Vijayanagaram. Their vassals, the Nayaks of Madurai and Thanjavur held sway over a greater portion of the territories that now form the jurisdiction of Pudukkottai district. It was during the period of the Nayaks, that the Tondaimans, who belonged to the Kallar caste came over to this area and offered military assistance to the then Nayak rulers of Madurai, Thanjavur and the Setupati of Ramanathapuram. Owing to their personal bravery and military prowess these people were granted several villages in the country and they also annexed a few more villages by the exercise of sheer military power. The Tondaimans had thus established themselves as rulers of the region in the late half of the seventeenth century.

When wars broke out between the English and the French in the 18th century for annexing territories by way of siding and helping one local king or the other the Tondaimans established themselves as one of the firmest allies of the East India Company. This continued support from the Tondaimans made the then Madras Government respect the independent sovereignty of these Rajas.

Economic life during all these political developments was in a disturbed state. The village assemblies with their powers to assess land, collect taxes for the State and protect the boundaries of the villages, had, because of the wars, to surrender their rights and duties to chieftains. These chieftains formed part of a feudal system in which military support from different areas was offered to the ruler by them. During the period of the early village assemblies, the village land was, apparently, cultivated in common and the produce was shared after paying the taxes. But this was gradually replaced by a free tenure system of 'inams'. Under this system lands were gifted by the rulers to persons who had rendered special or meritorious service to the State.

With the grant of these inams, the agricultural base of the economy was further strengthened. There was, however, no diversification of economic activities save the existence of some supporting services in each village. This, in general, was the state of affairs until the first half of the 19th century.

Fiscal System and Administration in the Pudukkottai State.— A definite pattern of fiscal administration in the State is perceptible only from the beginning of the 19th century. The revenue history of the former State falls into two divisions : (1) the earlier period of alienations and (2) a later period marked by the slow and steady building up of a sound revenue system. The dividing line is drawn at 1878 when the Diwan of Pudukkottai, Sir Sashih Sastri very boldly set out to reform the fiscal structure of the State, achieving a considerable degree of success. It is mentioned that "before this turning point was reached in 1880, the revenue policy of the State, if there was any such policy at all, was laissez-faire under which land was enjoyed by any one on any terms".

¹A Manual of the Pudukkottai State N. Thiagaraja Aiyar, 1921—page 387.

But even after this, the fiscal administration of the State was not based on principles that may be termed scientific. On the receipts side land revenue was the principal source but the yield from this tax was at a very low level. The tax base was narrow and the administration of the tax was fraught with many ills. There were also other taxes like excise on liquor and taxes on houses, looms and shops called *mohturpha*. Non-tax revenue was not significant. On the expenditure side, developmental expenditure consisted mostly of construction, repairs to tanks, *maramat* and advances for indigo works most of which were met out of specific purpose taxes called *poruppuvaries* of different kinds. Non-developmental expenditure like those on palace maintenance, military and salary of establishment claimed a major portion of the total expenditure. The rulers spent rather liberally, and each Raja at the time of his death left behind a huge debt. By 1856-57, the debt incurred by the State had reached Rs. 5½ lakhs.

This was the position when Sir Sashiah Sastri assumed office in 1878-79. The budgetary operations of the State can be subjected to a meaningful analysis only from this period.

The total receipts of the State in 1878-79 amounted to nearly Rs. 3.35 lakhs and the total expenditure about Rs. 3.12 lakhs, leaving a surplus of about Rs. 23,000. There was an up-trend in both revenue and expenditure in the years that followed and during most of the fiscal years the State managed to arrive at a surplus in the overall budget by curtailing expenditure and increasing the receipts from different heads, especially land revenue. There were occasional deficits in the State budget but these were made good by the accumulated balances created during surplus years. By 1907-08 the total receipts of the State had risen to Rs. 13.23 lakhs and expenditure to Rs. 10.75 lakhs, the closing balance in that year being Rs. 15.17 lakhs. Between 1907-08 and just prior to the merger in 1946-47, there was a three-fold increase in State revenue and expenditure. The accumulated balance had also risen to about Rs. 57.28 lakhs in 1946-47. The factors

that had a bearing on the receipts and expenditure of the State are explained in the separate sections on revenue and expenditure. The following table explains the overall budgetary position of the State for some select years.

<i>Year.</i>	<i>Receipts.</i>	<i>Expendi- ture.</i>	<i>Surplus or Deficit.</i>	<i>Opening Balance.</i>	<i>Closing Balance</i>
(1)	(2)	(3)	(4)	(5)	(6)
	RS.	RS.	RS.	RS.	RS.
1878-79 ...	3,34,910	3,12,375	+22,535	67,989	90,524
1887-88 ...	6,09,819	6,29,974	-20,155	7,00,649	6,80,494
1907-08 ...	13,22,699	10,74,559	+2,48,140	12,69,189	15,17,329
1927-28 ...	17,53,787	22,98,238	-5,44,451	24,23,498	18,79,047
1946-47 ...	39,22,527	30,17,899	+9,04,628	48,23,100	57,27,737

Trends in receipts.—Tax revenue has contributed consistently to the tune of 80 to 85 percent of the total receipts of the State. Among direct taxes in the Pudukkottai State, land revenue has been the principal item. Sashiah Sastri strengthened the base of this tax by bringing more land under assessment and plugging loopholes in the administration of the tax. This was achieved by carrying out the *Amami* settlement, the enfranchisement of inams, the resumption of the western palace Jagir and a conversion of grain rent into cash rent. All this resulted in an increase in the yield from this tax from Rs. 2·8 lakhs to Rs. 4·15 lakhs between 1878 and 1882. He did not make any attempt at revising the rates of land revenue. There was a steady increase in the yield from land revenue in the following years, owing to a few minor reforms like the Devasthanam amalgamation, *Brahmadeyam* inam settlement and resumption of Chinnaranmanai Jagir. These reforms were mainly in the form of improving the tax base and bringing more land under assessment. The first revision in the rates of land revenue was carried out during the revenue resettlement of 1908-12 when specific rates were assigned for different lands and, various crops under the three principal sorts of cultivation—wet, dry and garden. In the revenue resettlement scheme sufficient care was taken to see that the rates imposed in the State did not diverge much from the rate prevailing in the adjoining British

districts. With the implementation of these minor reforms and the revenue resettlement, the yield from land revenue had increased to Rs. 10 lakhs by 1914-15. There was no further revision in the system of land revenue upto the time of merger and the yield from this tax has maintained a consistent record of Rs. 10 lakhs per annum excepting during mid 1920.s and 1930.s when the State postponed the collection of land revenue and granted partial remissions due to severe drought conditions.

The other principal direct tax in the Pudukkottai State was stamp duty which was introduced only in 1908-09. This brought a revenue of about Rs. 1.1 lakhs at the time of introduction. But consistently increasing trend, with occasional mild fluctuations, was observed in the yield from this tax as it touched the Rs. 3 lakhs mark in 1923-24 and stood slightly above Rs. 4 lakhs just prior to the merger in 1946-47. The receipts from registration were of minor importance as the yield from this head ranged between Rs. 13,592 and Rs. 50,006 between 1887-88 and 1946-47. Assessed taxes or taxes levied on houses, looms and shops were introduced in 1861-62 and abolished in 1913-14. The yield from this tax has not exceeded Rs. 10,000 in any year and its importance in the total tax receipts was negligible.

Indirect taxes were mainly in the form of salt duty, excise on liquor, opium, ganja and land customs. Land customs, called tolls, were brought under the head "Civil Works". Sashiah Sastri suppressed the manufacture of earth salt in his period and obtained an annual grant of Rs. 38,000 from the British Government. He managed to increase the revenue from excises also by making the manufacture and sale of liquor a State monopoly. This increase in revenue from excise was slow and steady mostly due to the steady increase in the consumption of liquor in the State. By 1914-15 when the yield from land revenue had reached Rs. 10 lakhs, excise was contributing only Rs. 2.4 lakhs. But there was a sudden spurt in its yield just five years prior to the merger as between 1942-43 and 1946-47 revenue from excise and increased from about Rs. 5 lakhs to nearly Rs. 11.88 lakhs. The yield from his tax exceeded that of land revenue by a margin of about Rs 1.5 lakhs in 1946-47. This sudden buoyancy in excise is attributed to

the increase in consumption and sale of liquor, increased rentals collected from liquor, toddy, opium and ganja shops, the larger sales of locally made matches and the levy of excise duty on tobacco.

There were only two items of non-tax revenue viz., receipts from forests and interest. Sashiah Sastri managed to raise the revenue from forests by raising casuarina plantations. The revenue from forests which was about Rs. 12,000 in 1888-89 showed a modest increase over the next 30 years and touched the peak level of Rs. 90,554 in 1918-19. But after 1930, there was a steep decline in the revenue from this head due to various reasons, the most important of which was the fall in prices of casuarina and jungle wood. There was a reversal of this declining trend by 1941-42 and it had reached almost the past peak level just prior to the merger. There were some fluctuations in yield from interest but it is rather difficult to identify the factors that have caused these fluctuations as they are numerous. However, the total non-tax revenue of the State did not at any time exceed 15 to 20 per cent of the total receipts of the State.

सत्यमेव जयते

Trends in Expenditure.—The developmental heads in expenditure comprised education, medical, irrigation and civil works which included improvements to roads. During the last quarter of the 19th century a major portion of the developmental expenditure went towards irrigation, and civil works. Sashai Sastri diverted a portion of annual surpluses towards construction of buildings and improvements to tanks and roads. However, it can be mentioned that the major portion of the total expenditure of the State was on maintenance of palace, salary of establishment and the collection of different taxes. During the year 1889-90 expenditure on non-developmental heads constituted 63 per cent the total expenditure of the State.

Since the commencement of the 20th century, expenditure on palace and assignments steadily lost its relative importance in the context of the total expenditure, with the exception of a few years in the 1920's when the claims of palace maintenance shot up considerably. The striking feature of non-developmental expenditure during the 20th century was the extraordinary grant to the late king of Rs. 22 lakhs in 1922-23 at the time of his de-facto abdication, which actually doubled the total expenditure of the State and depleted the balance heavily. Expenditure on non-developmental heads like cost of tax collection, general administration, law justice and police continued to run high. A significant change in the structure of expenditures is the up-trend observed in the amount spent on education and public health since late 1920's. The introduction of free education at school level and the maintenance and growth of a second grade college in the capital led to increased allotments to Education during the third decade of the 20th century and expenditure on this head reached Rs. 1.20 lakhs in late 1930's.

STRUCTURE OF EXPENDITURE

Year.	Developmental.				Non-developmental.			
	Education.	Medical.	Irrigation.	Civil works.	Forest.	Assignments and palace.	Charges* of tax collection.	Administration-†
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1887-88	10,961	15,4094	..	..	2,79,274	1,21,398
1907-08	45,579	27,530	41,993	15,259	2,49,644	1,36,552	2,48,322
1927-28	1,99,298	1,09,174	82,672	3,32,400	22,613	4,94,617	3,34,919
1946-47	3,21,535	16,778	41,381	3,37,803	83,160	1,68,282	3,79,831
								6,05,230
								9,13,699
								30,17,899
								6,29,974
								1,03,332
								10,74,559
								4,65,881
								22,98,238
								30,17,899

NOTE.—*Charges of collection relating to Land Revenue, Salt and Excise and Registration.

†Includes General Administration, Law and Justice and Police.

‡Includes Political, Superannuation, Stationery and Printing, Contributions to Municipalities, Military, Civil list and other expenses.

RESOURCE ENDOWMENT AND DEVELOPMENT OF INFRASTRUCTURE

The resource potential of the district can be viewed from four angles viz., (i) Human resources, (ii) Agricultural and forest resources, (iii) Mineral resources and (iv) Marine resources.

Human Resources.—On the basis of the 1961 and 1971 census reports, the office of the Director of Census Operations has worked out the population figures for the areas presently constituting the Pudukkottai district. According to these reports, this region had population of 9,47,351 persons in 1971. The district with 3.58 per cent of the total geographical area of the State accounted for only 2.3 per cent of the total State population. Consequently the density of population in the district at 203 persons per sq. km. is considerably less than the State figure of 317 persons per sq. km. The district is predominantly agricultural without any major urban complex and this has been mainly responsible for the population being thinly distributed over space. The ratio of labour force to the total population is of considerable economic significance in population statistics and this labour participation ratio for the district was 34.16 per cent against the Tamil Nadu figure of 35.78 per cent in 1971. There has been a considerable decline in the ratio of labour force to population between 1961 and 1971. This has been uniformly observed throughout Tamil Nadu as it has mainly been brought about by a change in the concept of 'worker' in the 1971 census. The distribution of labour force among different sectors reveals that the district economy is still traditional with nearly 79 per cent of the total working population engaged in primary activities against the Tamil Nadu figure of about 65 per cent.

The rural-urban composition of population is often taken to be an indicator of the degree of economic advancement of a region. Tamil Nadu is considered to be one of the most advanced States in this respect as it has about 30 per cent of its total population living in urban areas. But Pudukkottai is far behind the State averages as only 12.14 per cent of its total population is urbanised. The literacy rate at 34.10 per cent of total population in the district is also lower than the State average of 39.46 per cent according to 1971 census.

Agricultural and forest resources.—The district has a vast stretch of land area measuring 466,328.69 hectares but the land potential is constrained by poor soil conditions and inadequate irrigation facilities. The net area cultivated is only 46.08 per cent of the total area. If current fallows, other fallow lands and cultivable waste are added to the net cultivated area, the net area available for cultivation would rise to nearly 60 per cent of the total area in the district. Taluk-wise, the gross cropped area was very low at 35 per cent of the total area in Tirumayam but it ranged between 50 and 60 per cent in all the other taluks of the district. Measures to reclaim cultivable waste and fallow lands and improvements in the irrigation system with greater reliance on underground water resources that would assure continued supply of water throughout the year would considerably improve the land use pattern in the district.

Land put to non-agricultural uses usually covers area under buildings, industrial undertakings, roads and railways or those under water eg. rivers and canals and all other lands not available for cultivation. Urbanisation and industrialisation usually lead to an increase in area under this category. Pudukkottai district had nearly 29 per cent of its total area under this category in 1973-74 against the State average of 11.7 per cent. This is not due to any significant advancement in industrialisation or urbanisation of the district but mostly due to the presence of a large number of tanks whose water spread area is assessed to be very high.

The soil in Pudukkottai is not very rich in fertility and it has also suffered from poor irrigation and soil erosion. Even the most fertile soil of Pudukkottai cannot stand any favourable comparison with the deltaic tracts of Tiruchirappalli and Thanjavur districts. This difficult soil has been an additional handicap to the peasants of Pudukkottai who face the problem of erratic rainfall.

Pudukkottai was once covered entirely with forests. But the 'forests' of Pudukkottai district now are scrub jungles with no trees of timber value. Though most of the forests have been cleared, the district still had 25,046 hectares or 5.37 per cent of the total area under forests. Pudukkottai stands fourth among the districts of Tamil Nadu in terms of area under forests. Tirumayam

taluk has the largest area under forests (nearly 12 per cent of its total area) in the district, followed by Alangudi and Kulathur. The main forest produce in the district are eucalyptus, cashew and fuel wood. An estimated quantity of 35,000 tonnes of eucalyptus pulp wood, 120 tonnes of cashew and 5,000 tonnes of fuel wood are available annually from the forests. These forest produce offer some scope for industrial development in this district in future, though the entire quantity of eucalyptus and almost all the cashew are sent out of the district at present. Nearly three fourths of the fuel wood is consumed locally.

Mineral Resources.—Geological survey reports have revealed the occurrence of gneisses, quartzite, pink granite, sand stones, laterite, alluvial sands, kankar, yellow ochres and clays in the district. Judged by economic importance, the following are the important minerals of the district. Limestone deposits occur in a few places of the district especially Adanakkottai area. The district has an estimated reserve of 8,230 tonnes of limestone while the present level of exploitation is only 200 tonnes per annum. Limestone has considerable potential for industrial utilisation as chemical grade limes made out of lime stone are largely required by chemical, paper and sugar industries.

Coloured clays (ochres) of an impure grade and limited thickness useful for manufacturing distempers and pigments are found near Chottipatti and Sengirai forests. The district has greater reserves of red ochre than yellow. Estimated reserves of yellow ochre are 15,000 tonnes of which two thirds have already been exploited.

Three small patches of white clay are reported to occur in Arantangi taluk to the level of 70,000 tonnes. Chemical analysis has revealed that the clay is of low refractory nature with high iron content.

Laterite formations of 5 to 10 feet thickness agglomeration of low grade hydrated oxides of iron and alumina and quartz containing 10 to 15 per cent of iron occur all over the eastern portions of the district. Laterite formations are useful as foundation stones as well as for cement manufacture for which iron and alumina are essential.

Building stones and rock materials are quarried in Kulattur and Tirumayam taluks. Good quality quartz and feldspar that are used in ceramics, glass and optical industries are available in Kulattur taluk. The silican sand deposits near Arantangi are well suited for glass manufacture, potteries and foundry use.

Rolled pebbles of quartz occur in the south west portions of former Thanjavur district which have now been brought under Pudukkottai. These estimates of different mineral deposits are only rough approximations. However, with the available information, it may be stated that efforts at setting up a sophisticated industrial complex based on the district's available mineral resources may not prove to be economically viable in the long run.

Marine Resources.—Marine, inland and estuarine fisheries are carried on in a small scale in the district. The district has a coast line of about 70 kms. There are nine major sea-fishing villages and the quantity of marine fish landed per annum is about 400 tonnes. Inland fishing is highly seasonal and confined to tanks and ponds. The total quantity of fish landed from these sources is about 200 tonnes per annum. Small inedible fish are also available in the estuarine rivers of Arantangi taluk to the tune of about 250 to 300 tonnes but they are presently sent to Kerala for the manufacture of fish meal.

There is scope for the development of industries based on marine resources viz., industrial grade salt, marine chemicals, lime from sea shells, etc. Salt farms are presently reported to operate on about 1,000 acres.

Transport Roads.—Metalling, widening, and the proper maintenance of important roads to Tiruchirappalli, Thanjavur and Madurai, the building of bridges and culverts, opening of police stations, organising roads, patrols and running of horse carriages were first undertaken in the district only in last quarter of the 19th century. The development of roads during the first quarter of the 20th century is stated to have been very impressive and in 1930s

the State of Pudukkottai was considered to be better equipped with this infrastructure than the adjoining British districts. The State had a road length of 41.1 miles per 100 sq. miles of area and this was considerably higher than what was obtaining in the other districts. This might have been partly due to the fact that the area of this State was considerably less than that of the adjoining districts. There were improvements in travelling conditions also. In 1910 there was only one bus plying between Tiruchirappalli and Pudukkottai but in 1944 all important places like Tiruchirappalli Thanjavur, Karaikudi, Pattukkottai, Arantangi, Madurai and Dindigul had direct bus connections with Pudukkottai town with a fleet of more than a hundred buses.

However, at the time of the formation of this district, the development of this basic infrastructure was not very encouraging. The road length per sq. km. was 0.58 in the district against the State average of 0.66 in 1973-74. In 1974, the district had a total road length of 2,699.30 km. comprising 78.1 kms. of State highways, 420.2 km. of major district roads, 676.7 km. of other district roads, 1,014.10 km. of panchayat union roads and 510.20 km. of panchayat roads. Out of the 758 villages in the district only 316 have *pucca* roads and 336 are connected by *Kutcha* roads only. The remaining 103 villages remain inaccessible to any regular mode of transport and are connected only by tread paths and irregular routes. The usual mode of transport is even now mostly bullock carts and the use of trucks and lorries is very limited. The number of motor vehicles per lakh of population is only 85 against the State average of 310.

Railways.—In the former Pudukkottai State there were no railways upto 1929 though the South Indian Railway and Thanjavur District Board Railway passed close to the eastern and western boundaries of the State. The Tiruchirappalli—Pudukkottai line was opened for traffic on April 17, 1929 and Pudukkottai—Manamadurai section on July 1st, 1930. The distance covered by the railways within the State was 40.30 miles (with 23.78 miles in Kulattur taluk, 5.73 miles in Alanguditaluk and 10.79 miles in Tirumayam taluk) prior to the merger.

At present the new district of Pudukkottai has a total route length of 83.4 kms. which forms 2.2 per cent of the total route-length of the State. The metre gauge railway line from Madras to Rameswaram runs more or less through the centre of the district covering the panchayat unions of Viralimalai, Kunnadarkoil Annavasal, Tiruvarangulam, Arimalam and Tirumayam.

Power.—There were two electric supply corporations in the former Pudukkottai State. Pudukkottai Electric Supply Corporation located in the capital town of Pudukkottai started functioning on 26th April 1928. In the initial years this corporation obtained a financial support of Rs. 20,000 from the State and Rs. 15,000 from the municipality as loans.

In 1935, the Corporation generated 2.40 lakh units of electricity by using diesel engines and extended house connections to 400 households, supplied power to the municipality for street lighting and for motor pumps in the town water works. Besides this power supply was also made to three printing presses in the town, a flour mill, a coffee grinding mill and also two permanent cinema in the town.

Sri Brahmaidambal Electric Supply Corporation Limited was established in 1927 to supply power to a few rich chetti villages near Ramachandrapuram. The coverage of this corporation was extended to villages lying within 16 miles of Ramachandrapuram by 1935. The unions at Ramachandrapuram, Rayavaram, Kona-pet and Arimalam were supplied power by this Corporation.

The present power position of the district can be stated to be comfortable. There is no hydro or thermal-generating station located within the district. Rural electrification in the district is almost of the same level as the State performance since 97.68 per cent of the villages and hamlets in the district are electrified against 98.5 per cent in Tamil Nadu. The number of pump sets energised in the district is 6,459 which forms one per cent of the total number of pumpsets energised in Tamil Nadu.

According to the Superintending Engineer, Tiruchirappalli; Electricity System, the district's consumption of electricity per month, and the revenue realised, is as follows :

<i>Classification.</i>	<i>Consumption in units.</i>	<i>Revenue realised in rupees.</i>
Domestic	2,82,177 (15.95)	1,34,056.00 (19.42)
Commercial	2,03,053 (11.48)	1,59,436.00 (23.09)
Public lighting	1,31,063 (7.41)	57,410.00 (8.32)
Industrial	5,83,613 (32.99)	2,17,307.00 (31.48)
Agricultural	5,58,520 (31.57)	93,465.00 (13.54)
Others	10,646 (0.60)	28,672.00 (4.15)
Total	17,69,072 (100.00)	6,90,346.00 (100.00)

Note.—Figures in parentheses represent percentage to total Consumption and Revenue.

Total consumption of electricity in the district is 2.12 crore units per year the bulk of which, i.e. as much as 31.57 per cent is for agricultural purposes. For Tamil Nadu as a whole, in 1973-74, the consumption of electricity by agriculture was only 28 per cent of the total consumption. With the absence of any modern industrial complex, it is no wonder that the share of agriculture in total consumption of electricity in the district is fairly higher than the State figure. It is also contended that adequate electric power is available for starting new industries in the district. Arantangi and Tirumayam taluks of the district have been declared "industrially undeveloped" by the Government of Tamil Nadu and the new industries set up there will be entitled to a concession in power tariff.

Banking.—Banking was the principal occupation of the Nattukkottai Chettiars of the former princely State though they were more interested in banking transactions in overseas British settlements like Ceylon. As a result of this there were not many well-established banking institutions in this district. In the *Manual of Pudukkottai State*, Volume I, it is mentioned that there were 12 Joint Stock-Banking Corporations, although no information is available regarding the volume of banking transactions in the State.

Now there are 34 branches of commercial and other banks in the district. The Indian Overseas Bank, Indian Bank, Canara Bank, Punjab National Bank, United Commercial Bank, State Bank of India, Bank of Madurai Limited, Pudukkottai, Central Co-operative Bank, Pudukkottai Town Bank Limited and Thanjavur Permanent Bank Limited are the important banks having branch offices in the district. The total deposits of these banks amount to Rs. 533 lakhs. The Indian Overseas Bank officiates as the lead bank of the district.

Agriculture.—The district economy is predominantly agricultural with 87.86 per cent of its total population living in rural areas and nearly 78 per cent of the total labour force engaged in agricultural activities. This rigid traditional pattern has continued for a fairly long time and even after independence when traces of industrial advancement were observed in other parts of Tamil Nadu there was not any significant economic transformation in this region.

Traditional patterns.—The agricultural base of the former Pudukkottai State was stabilised only after the commencement of the 19th century when the era of continuous wars in this area ended. Three principal types of cultivation had come into vogue by this time, viz., wet, dry and garden. Paddy was the principal wet crop grown mostly in the ayacut areas of big tanks like Kavinad, Valanad, etc. Relatively fertile soil and the presence of an enterprising farming community of Udayars at Kulattur led to the concentration of paddy cultivation in this taluk. Ragi, varagu, cholam, cumbu, and grams were the principal dry crops and sugarcane, tobacco, plantain and betelvine were the major garden crops supplemented by turmeric, different kinds of potatoes, vegetables

and condiments in a small way. This classification of cultivation into wet, dry and garden was not very rigid as wet lands were often converted for dry cultivation during times of monsoon failures.

The cropping pattern in this region has been influenced more by the behaviour of monsoons than by the operation of economic or market forces. The only perceptible change has been the sustained increase in the area under groundnut cultivation. There was a setback in the area under groundnut with the onset of the trade depression during early 1930's but this was reversed and it continued to raise steadily after 1935. In a Revenue Settlement Report published in 1945, S. V. James has recorded that the cropping pattern in the Pudukkottai State shifted generally in favour of paddy, ragi, horsegram, redgram, cumbu, groundnut and cholam at the expense of other crops. The shift in cropping pattern was mostly influenced by the changes in climatic conditions, mainly rainfall¹. By and large paddy has been the most important crop in Pudukkottai. However, the total production of paddy was not sufficient to meet the local needs. Over a period of 15 years (1920-35), on the basis of the average area and yield rate, the total production of paddy was estimated at 50,301 tonnes per year. Of this, 5,525 tonnes were required for seeds and the remaining 44,776 tonnes of paddy (29,850 tonnes of rice) were available for consumption. The total requirement of rice in the State on an average worked out to 39,250 tonnes on the basis of total adult population. Hence the Pudukkottai State had to import 9,400 tonnes of rice, the value of which was nearly Rs. 12.48 lakhs at the then prevailing price of Rs. 4.14.0 per maund. This large deficit in rice production was usually met by imports from the adjoining fertile areas of Tiruchirappalli and Thanjavur.

The Darbar was aware of the miserable condition of its ryots and adhoc measures were adopted to improve the lot of the ryots. Realising the need for credit on easy terms by farmers, the Pudukkottai State also helped the opening of numerous rural co-operatives

¹ This view may be supported by the fact that the area under paddy varied with rainfall. In 1920, when the rainfall was 60.44 inches paddy was cultivated in 1,61,000 acres and when in 1934, rainfall was only 25 inches, area under paddy fell to 36,000 acres. At least a portion of the area released from paddy cultivation was used for the cultivation of dry crops.

by financing them liberally. Loans were given for agriculture and well-digging and the terms of such loans were made liberal. At the end of 1934-35 the balance of loans outstanding for agricultural purposes was Rs. 3,82,151.

During periods of drought (a very familiar villain in this region) the State postponed the collection of land revenue and interest on loans and also offered alternative employment to the farmers by undertaking repair works on tanks and roads. The sizeable increase in expenditure on civil works and fall in land revenue during drought years bear testimony to these facts.

Present conditions. - The agrarian structure of the district has been slightly altered with the inclusion of Arantangi taluk and a few more portions from Thanjavur district. As these areas are supported by canal irrigation their inclusion has brightened the scope for agricultural advancement in this region.

Of late there has been an increasing awareness among farmers of the improved methods of cultivation, thanks to the co-ordinated efforts of the different agencies entrusted with the function of improving the agricultural conditions in the district. However, it is too early to see if these measures have made any dent on the agricultural performance of the district as they have been under way only for a very short time.

The total cropped area of the district is about 2,29,683 hectares of which nearly three fourths are devoted for food crops and the remaining portion for non-food crops. Paddy and groundnut are principal among the food and non-food crops respectively. The cropping pattern of the district as it obtained in 1973-74 is illustrated in the table below :

CROPPING PATTERN IN PUDUKKOTTAI DISTRICT 1973-74.

Crops.	Food Crops.			Other food crops			(Area in Hectares).	
	Area.	Pulses.	Area.	Area.	Area.	Area.	Non-food crops.	Area.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Paddy ..	1,12,055.45 (77.28)	Redgram	2,793.11 (36.02)	Spices and condi- ments.	1,578.95 (12.72)	Fibre crops	..	495.95 (0.77)
Varagu ..	19,308.10 (13.32)	Horsegram	2,004.85 (25.86)	Sugar	851.42 (6.86)	Oilseeds of which	..	53,738.86 (83.30)
Ragi ..	5,912.14 (4.02)	Blackgram	1,672.46 (21.56)	Fruits casbew and Vegetables.	9,983.00 (80.42)	Groundnut	..	50,786.63 (78.72)
Maize ..	3,355.06 (2.31)	Greengram	754.25 (9.73)	Total (other food crops).	12,413.37 (100.00)	Coconut	..	1,559.9 (2.421)
Cholam ..	3,014.97 (4.08)	Others	529.57 (6.83)	....	..	Gingelly	..	1,315.78 (2.04)
Cumbu ..	766.80 (0.53)	Total	7,754.24 (100.00)	....	..	Castor	..	72.53 (0.01)
Others ..	591.12 (0.40)	..	..	....	..	Others	..	10,772.87 (16.70)
Total ..	1,45,003.64 (100.00)	..	..	....	..	Total (from food crops).	..	64,511.73 (100.00)

Area and percentage distribution of food and non-food crops to total cropped area (1973-74).

Crop.				Area (Hectares).	Percentage to total.
(1)				(2)	(3)
A. Food—					
Cereals	..	..	..	1,45,003.64	63.13
Pulses	..	..	..	7,754.24	3.38
Other	..	..	..	12,413.27	5.41
Total food crops	..	..		1,65,171.25	71.92
B. Non-food crops	..	..		64,511.73	28.08
Total—(A+B)				2,29,682.98	100.00

Food crops are divided into cereals, other food crops and pulses in that order of importance in terms of area. Paddy in general claims most of the cropped area in the district. But double cropping of paddy which is well-known in the surrounding Tiruchirappalli and Thanjavur districts is not very popular here excepting in Arantangi taluk. This is mostly due to the dependence on a rainfed tank irrigation system which does not guarantee an assured supply of water to support two crops of paddy. The total production of rice in the district was estimated at 2,09,450 tonnes in 1973-74 and its yield rate at 1,870 kgs. per hectare was considerably less than the Tamil Nadu average of 2,067 kgs. The entire district is covered by the high yielding varieties programme for paddy and the lower yield rate can be attributed only to the poor fertility of the soil. However, with 2.3 per cent of the Tamil Nadu population, though this district produces nearly 3.7 per cent of the total Tamil Nadu production of rice in normal years, frequent failure of monsoons has made this district often a deficit area in rice. Among cereals, varagu, maize, cholam and cumbu are other crops grown in that order of importance. It appears that maize is a crop that is well suited to the soil of this region and its yield rate in the district is slightly higher than that of the State average. The

district contributed 17.5 per cent of the total production of maize in Tamil Nadu in 1973-74. Maize which is not a very popular item of consumption in other areas of Tamil Nadu is consumed here on a fairly large scale.

Pulses are not grown on a large scale in this district but with the research activities carried on in Annapannai for the improvement of these crops it is anticipated that greater attention will be paid to the development of these crops in future.

Among commercial crops, groundnut and cashew are most important. Groundnut, in general, is only next in importance to paddy both in terms of area and production. The area under groundnut has been consistently increasing and in 1972-73, this region accounted for nearly 48,950 tonnes or 4.73 per cent of the total State production. Its yield rate was also slightly higher at 976 kgs. per hectare against the State average of 965 kgs. This is a cash crop which yields high returns to the farmers. The successful cultivation of this crop on a larger scale would considerably improve the purchasing power of the farming community, generate good demand and thereby act as a market incentive for the emergence of non-agricultural activities, the lack of which is a major obstacle in the development of this district. Cashew is grown in Government forests and private plantations. Annual production of cashew on an average is estimated at 1,850 tonnes. Most of the cashew produced in the district is now sent out for processing. The extension of area under this crop needs careful attention as this crop is well suited to the soil and its larger production would enable the setting up of many agro-based industries with moderate capital investment, simple technology and large employment potential. Production and yield rate of principal crops in the district are given in the following table.

Agricultural Production and yield rate with reference to specific crops in Pudukkottai and Tamil Nadu, 1973-74.

Item.	Agricultural Production (in Tonnes.)			Yield rate per hectare (in Kgs.)	
	Pudukkottai.	Tamil Nadu.	Percent age of column (2) to column (3).	Pudukkottai district.	Tamil Nadu.
(1)	(2)	(3)	(4)	(5)	(6)
1 Rice	2,09,450	55,89,480	3.7	1,870	2,067
2 Chulam	2,460	5,69,320	0.4	816	888
3 Cumbu'	600	3,39,660	0.2	782	847
4 Maize	3,570	20,380	17.5	1,064	1,053
5 Ragi	5,850	3,18,670	1.8	990	1,211
6 Total cereals	2,43,000	71,19,880	3.4	..	..
7 Total pulses	2,900	2,04,780	1.4	..	..
8 Total foodgrains	2,45,900	73,24,660	3.4	..	..
9 Sugarcane (gur)	6,460	19,70,110	0.3	..	..
10 Chillies	2,420	1,09,020	2.2	1,810	1,444
11 Cotton	1,140	3,38,180	0.3	N.A.	N.A.
12 Groundnut*	48,950	10,35,010	4.73	976	965

Source: Director of Statistics, Madras.

*Relates to the year 1972-73.

Pattern of irrigation.—Only less than half the gross cultivated area comes under regular irrigation and the remaining major portion is rainfed in this district. Among the three major sources of irrigation, viz., tanks, canals and wells, tanks account for more than three-fourths of the gross irrigated area with Government canals irrigating 13.28 per cent and the remaining meagre portion being left to well irrigation.

There are 4,945 tanks in the district with more than two-thirds of them located in Kulattur and Tirumayam taluks. It is estimated that there are 3.5 tanks per sq. mile. Most of the tanks, excepting those in Arantangi taluk, are very shallow as a result of which the command area per tank in the district is as low as 16.25 hectares. Most of these tanks are rainfed and remain dry during seasons of delayed and scanty rainfall.

Canal irrigation is almost unknown in all the taluks of the district excepting Arantangi and Alangudi. Arantangi claims nearly 87 per cent of the total canal irrigated area of the district and another 10 per cent is accounted for by Alangudi taluk. Canal irrigation is only a recent development in the latter as only by 1950 the Olavayal channel was extended to irrigate 2,300 acres of Alangudi taluk.

Well irrigation is not very popular in Pudukkottai district. Wells, both open and tube wells, account for less than ten per cent of total irrigated area, the contribution of tube wells being less than one-half of a per cent. There is scope for improving this relatively more reliable form of irrigation in the district and efforts have to be made to assess the ground water potential.

The District's Agricultural Budget.—After the formation of the district as a separate administrative entity, special attention is being given by the Government to improve and develop the agricultural base in the district. With this view, several schemes and programmes have been initiated in the district, which together with the funds allotted, may be observed from the following table which depicts the agricultural budget for the district and the State.

Expenditure on Agriculture—Pudukkottai District.

Serial number and item.	1974-75		Percentage to State Total.
	*Pudukkottai District. (in Rs.)	**State (in Rs. '000')	
(1)	(2)	(3)	(4)
1. Direction and Administration.. ..	83,967.17 (5.00)	1,02,16 (4.99)	0.82
2. Multiplication and Distribution of Seeds.	2,99,660.33 (17.83)	3,19,60 (15.61)	0.94
3. Manures and Fertilizers. . . .	55,632.25 (3.31)	29.05 (1.42)	1.92
4. High Yielding Varieties Programme . .	1,91,608.68 (11.41)	57.40 (2.80)	3.34
5. Plant Protection	6,85,237.61 (40.80)	6,72,21 (32.83)	1.02
6. Commercial Crops	12,137.00 (0.72)	2,87,41 (14.04)	0.34

Expenditure on Agriculture—Pudukkottai District—cont.
1974-75

<i>Serial number and item.</i>	<i>*Pudukkottai District. (in Rs.)</i>	<i>**State (in Rs. '000')</i>	<i>Percentage to State Total.</i>
(1)	(2)	(3)	(4)
7. Extension and Farmers Training ..	1,43,514.98 (8.55)	1,04,15 (5.99)	1.38
8. Agricultural Engineering	18,349.73 (1.09)	1,98.38 (9.69)	0.09
9. Agricultural Marketing and Quality Control.	10,412.25 (0.62)	32.51 (1.59)	0.32
10. Horticulture	11,124.95 (0.66)	35.55 (1.73)	0.31
11. Soil and Water Conservation	174.50 (0.01)	71.67 (3.50)	0.02
12. Other Expenditure	1,62,117.41 (9.65)	1,23,65 (6.04)	1.31
13. Loans and Advances	5,875.00 (0.35)	13.78 (0.67)	0.43
Total	16,79,811.86 (100.00)	20,47,52 (100.00)	0.82

* Source : District Agricultural Officer, Pudukkottai.

** Source : Budget Documents.

NOTE : The State Agricultural Budget also covers an additional expenditure of Rs. 326.6 lakhs on certain schemes which are not actually implemented in Pudukkottai district.

Of the total estimated expenditure of Rs. 16.8 lakhs for the district nearly 62 per cent (as also in the case of the State) is to be spent on schemes pertaining to basic inputs like high quality seeds, manures and plant protection chemicals. The high yielding varieties programmes, which covers the entire district and the agricultural extension and farmers training scheme have also gained their due importance with 11.4 and 8.6 per cent of the total expenditure against the State allotment of 2.8 and 5.1 per cent respectively on these

heads. One disturbing feature observed, however, is the lesser importance given to the development of commercial crops in the allocation of funds, with less than 1 per cent of the expenditure going to this head. The district has a good potential for growing groundnut and cashew in large quantities and increased expenditure on the development of these crops would yield definitely high returns

INDUSTRIES.

Handicrafts.—In the year 1929, a survey of cottage industries in the Pudukkottai State was carried out which revealed that besides agriculture some industries with some economic importance like weaving, mat-making, oil pressing, bangles, bricks and tiles, ceramics and metals were also functioning in the State. These cottage industries, by and large, exhibited some distinct characteristics: (i) Each industry had its own particular clan or class of people attached to it; (ii) most of these industries were only supplementary occupations to agriculture; and (iii) each industry had its own choice of location and was concentrated in that area. Weaving, mat-making and oil pressing were industries based on agricultural resources and metal, bricks and tiles, ceramics and bangles manufacture were industries based on metals and minerals.

Cotton, silk and wool spinning and weaving were of utmost importance among cottage industries. Whereas cotton and wool weaving were not very significant, the outturn of silk weaving was considerable as it stood at Rs. 5,50,000 in 1929. Silk weaving faced stiff competition from the produce from Kumbakonam Madurai, Madras and Bangalore and gradually lost its importance, later. Dyeing, which was an ancillary industry to weaving was on the verge of decay during late 1920's and no steps were taken to revive this industry later.

'Korai' grass was imported from Tiruchirappalli and Than-lavur. Mats, fans and baskets were also made of palmyra leaves in insignificant quantities in the Pudukkottai State. Oil pressing has been an important industry from very old times and gingelly and groundnut oils were pressed by the local *Chekus*.

Among industries based on non-agricultural resources, bell and brass metals manufacturing received excellent market support from the Nattukkottai Chettis of the region who were in the habit of offering vessels as part of the system of 'Dowry' that was in vogue. Copper and brass sheets were imported from Madras and vessels were produced in factory establishments in large quantities. It is estimated that the turnover of each workshop was over Rs. one lakh a year. Availability of good quality clay encouraged the manufacture of bricks, tiles and pottery on a large scale in the State. The buoyant nature of this industry paved the way for a marked increase in construction activity in the State. The bangles and ceramics industry which was once thriving in the State became dormant in the late 1920's. The non-availability of cheap fuel, large imports of cheap and attractive foreign stuff and the gradual disappearance of the technical skill were mainly responsible for the decay of these industries.

State Participation.—There are traces of State participation in industrial activities in the former Pudukkottai State. It had the virtual monopoly over the manufacture of earth salt until it was suppressed in 1887 in return for an annual compensation grant of Rs. 38,000 from the British Government. The Pudukkottai State had saline deposits of earth and the salt made out of this earth was reported to contain 97.6 per cent of Sodium Chloride. It leased out the right to manufacture earth salt to private parties and arranged for its retail distribution through many government sales depots. The total production of earth salt in 1875 was estimated to be 15,000 kalams.

In 1814, the then Raja together with John Blackburne started an indigo factory. This proved to be a successful venture and the second indigo factory was also established. But when Blackburne left India, the factories had to be closed down due to mismanagement. The flourishing nature of the bricks and tiles industry induced the Darbar to venture in that field. In 1929, there was a Government factory managed by the Public Works Department manufacturing high quality bricks and tiles.

The Present Industrial Position.—Even after merger there does not seem to have been any spurt in industrial activity in this region

However a few developmental measures have been underway. An industrial estate with sixteen sheds has been constructed and three more are being planned at Mathur, Ponnamaravati and Arantangi. At present there are five large scale, one medium and 332 small scale industries functioning in the district.

Large Scale Industries.—Out of the five large scale industries in the district, three are textile mills, one is an automobile sales and service unit and the other a State Government Press. With the exception of the Press all the other units are in the private sector.

The three textile mills in the region are M/s. Cauvery Spinning and Weaving Mills Limited, Pudukkottai Textiles Limited and Sri Nadiambal Textiles. Sri Nadiambal Textiles is of recent origin but the other two have been in existence for over two decades now. The total investment, capacity, production and employment in these three industries are given below :—

<i>Name.</i>	<i>Fixed Capital.</i>	<i>Working Capital.</i>	<i>Total investment.</i>
(1)	(2)	(3)	(4)
(RS. IN LAKHS)	(RS. IN LAKHS)	(RS. IN LAKHS)	(RS. IN LAKHS)
1 Cauvery spinning and weaving Mills Limited.	85.17 (44.1)	15.93 (49.9)	101.10 (44.9)
2 Pudukkottai Textiles Limited ..	52.57 (27.2)	10.85 (34.0)	63.42 (28.2)
3 Sri Nadiambal Textiles Limited	55.29 (28.7)	5.14 (16.1)	60.43 (26.9)
Total	193.03 (100.00)	31.92 (100.00)	224.95 (100.00)

<i>Name.</i>	<i>Installed capacity Spindlarge.</i>	<i>Production. (Kgs.)</i>	<i>Employment. (Nos.)</i>
(5)	(6)	(7)	(Nos.)
(Kgs.)	(Nos.)	(Nos.)	(Nos.)
1 Cauvery spinning and weaving Mills Limited.	31,200 (56.0)	10,35,752 (48.8)	1,184 (57.2)
2 Pudukkottai Textiles Limited ..	12,460 (22.4)	6,82,252 (32.1)	485 (23.5)
3 Sri Nadiambal Textiles Limited	12,020 (21.6)	4,05,808 (19.1)	400 (19.3)
Total	55,680 (100.00)	21,23,812 (100.00)	2,069 (100.00)

It is very clear that Cauvery Spinning and Weaving Mills is by far the most important textile mill in the district. With relatively high investment and installed capacity this mill accounts for about 49 per cent of the production and 57 per cent of the total employment. The recent glut in the textile market, cost escalations and the severe power cut during 1974 resulted in under utilisation of capacity and heavy losses to both Cauvery Spinning and Weaving Mills and Pudukkottai Textiles. Sri Nadiambal Textiles earned a moderate profit of Rs. 3 lakhs during this year and this unit also has a proposal to double its capacity within a period of two years which would create additional employment opportunities for about 250 persons.

There is one large scale automobile engineering workshop run by T. V. Sundaram Iyengar and Sons Limited. This concern was started in a small way as a branch of the Karaikkudi establishment in 1935. It has made significant strides of progress and when the workshop was shifted to the present premises in 1958, it had a strength of about 50 employees.

The concern at present has three functions, acting as distributing agents for Premier Automobiles, Mahindra and Mahindra jeeps and Ashok Leyland buses, sale of spare parts for all kinds of automobiles and undertaking repair, overhauling and servicing of all vehicles. The total fixed investment was about Rs. 14.72 lakhs on March 31st, 1975. The concern had 332 persons on its rolls in March, 1975 which included executive, supervisory and office staff. The total turn-over of the concern for the year 1974-75 was Rs. 1.8 crores.

A medium scale industry, Ramachandra Chemicals has been set up recently with the assistance of SIPCOT. The investment in the industry is about Rs. one crore and it has a capacity to produce 12 tonnes of fatty acid and glycerine per annum from non-edible oils such as neem oil, rice bran oil etc. The raw materials are being obtained at present from Madras.

Small-Scale Industries.—Any industrial establishment with an investment of less than Rs. 10 lakhs on machinery and equipment is brought under the category of small scale industries. The

Directorate of Industries and Commerce have prepared a list of 332 small scale industries in the district. Of these 332 units, information in regard to investment and value of production is available for 181 units.

<i>Industry group.</i>	<i>No. of units.</i>	<i>Fixed Capital.</i>	<i>Working Capital.</i>	<i>Total invest- ment.</i>	<i>Production.</i>
(1)	(2)	(3) (RS.)	(4) (RS.)	(5) (RS.)	(6) (RS.)
1. Wood based Industries ..	83	6,82,804	3,78,500	10,61,304 (18.17)	14,11,476 (12.93)
2. Agricultural implements	21	2,52,787	1,52,150	4,04,937 (6.93)	9,42,136 (8.63)
3. Household articles ..	15	2,15,666	2,82,300	4,97,966 (8.52)	3,96,929 (3.64)
4. Wax candle making ..	7	32,420	11,000	43,420 (0.74)	46,900 (0.43)
5. Cement tiles and pipes ..	7	1,91,000	30,000	2,21,000 (3.78)	1,19,889 (1.10)
6. Metal Industries ..	7	2,78,834	1,09,000	3,87,834 (6.64)	2,73,168 (2.50)
7. Washing soap	6	1,59,000	1,34,000	2,93,000 (5.02)	11,62,564 (10.65)
8. Bakery and biscuits ..	5	93,000	32,250	1,28,250 (2.20)	2,30,570 (2.11)
9. Printing and Binding ..	5	3,16,000	72,000	3,88,000 (6.64)	3,44,429 (3.16)
10. Safety matches and colour matches.	4	1,80,500	1,69,000	3,49,500 (5.98)	7,19,728 (6.59)
11. Blacksmithy	4	12,500	6,000	18,500 (0.32)	32,250 (0.30)
12. Automobile repairing and servicing.	4	2,83,655	56,000	3,39,655 (5.81)	1,39,694 (10.28)
13. Chewing Tobacco ..	3	1,00,933	7,00,000	8,00,933 (13.71)	36,47,047 (33.42)
14. Bullock and horse shoes	3	71,400	24,000	95,400 (1.63)	58,100 (0.53)
15. Others ¹	7	5,73,950	2,38,081	8,12,031 (13.90)	13,89,030 (12.73)
	181	34,44,449	23,97,281	58,41,730 (100.00)	1,09,13,937 (100.00)

Source : Assistant Director of Industries and Commerce, Pudukkottai.

¹ Relates to industries with one unit each. Figures in brackets indicate percentage to total.

Wood based industries which mostly undertake job work in carpentry are 83 in number out of the 181 small scale establishment in the district. They accounted for 18.17 per cent of the total capital investment in small industries and 12.53 per cent of their total production. Other important industry groups viewed from the angle of their total investment and production are those engaged in the manufacture of agricultural implements, household articles, cement tiles and pipes, metal products, printing and binding, and chewing tobacco.

Besides, there are about 30 groundnut oil pressing units mostly located in Alangudi taluk which decorticate nearly 12 lakh bags of groundnut annually. There are also 19 oil mills comprising 12 expellers and 7 rotary type which crush groundnut kernel into oil. It is estimated that the total production of groundnut oil stood at 8,500 tonnes in 1973-74 in the district. Another small scale unit of some importance is the cashew processing firm at Gandharvakkottai. This unit has a capacity to process 200 to 250 tonnes of cashewnuts a year and produce 200 kgs. of cashew shell oil per day. The unit employs 75 workers.

Employment.

The grant of inam lands to different sets of people had encouraged the adoption of agriculture as a generally accepted form of livelihood. Other kinds of employment were not unknown. Each village had its complement of artisan class who specialised in the provision of village services. Under the *amani* system there was a provision to support such village services. The village artisans were provided with a portion of the total agricultural produce and only the rest was shared between the State and farmers.

According to the 1931 Census out of a total population of Pudukkottai State of 3,00,964 persons only 64.50 per cent were classified as earners and working dependents. Among the workers nearly 51 per cent were engaged in agricultural and pastoral occupations, about 6 per cent of them in industries and the rest in services. The classification of workers into different sectors was not based on any scientific principle as the village barbers,

washermen, scavengers, etc., were classified as industrial workers. Besides there was no specific occupational specialisation in those days, and employment in industries or services was only supplementary to the principal occupation which was agriculture.

As was the case with the rest of India, in Pudukkottai State also there were occupational divisions based mostly upon the caste system and employment in different trades was mostly hereditary. The Uppiliars engaged themselves in salt manufacturing, the Kurumbars in wool spinning and weaving, the Koravars in rope making, Vellalars and Udayars in agriculture, Nattukkottai Chettians in money lending, the Brahmins in temple worship and so on. There are evidences of the development of a number of cottage industries in the former Pudukkottai State but no proper assessment of employment in these industries is possible as no employment was offered on a regular or permanent basis in these organisations. This continued to be the state of affairs upto the time of merger.

Present Employment position in Pudukkottai District.—The two principal sources of information offering particulars regarding present employment position in the district are (1) the Census Reports and (2) the Directorate of Employment. The former reveals the livelihood pattern of the people in general and this information is available for the years 1961 and 1971. The latter touches upon employment in the organised sector for the district and this information has been culled out from the employment records from Tiruchirappalli and Thanjavur districts for the areas that have been brought under Pudukkottai district. This information is also available for the periods ending IInd Plan, IIIrd Plan, Annual plans and IVth Plan.

Livelihood Pattern in Pudukkottai.—The total labour force in Pudukkottai was 3.24 lakhs in 1971. Of the total working population nearly 84 per cent were males and 16 per cent females in the district. The livelihood pattern in Pudukkottai district for 1961 and 1971 is given in the following table:—

Livelihood Pattern in Pudukkotal district 1961 and 1971.

	(1)	1961*			1971		
		Male. (2)	Female. (3)	Total. (4)	Male. (5)	Female. (6)	Total. (7)
Primary	1,82,695	1,38,575	3,21,270	2,10,385	46,140	2,56,525
Cultivators	1,54,406	1,11,076	(84.09) 26,382	1,64,018	23,409	1,87,427
Agricultural Labourers	18,883	21,808	40,781	42,647	21,894	64,441
Livestock, Forestry, Fishing, hunting, Plantations and allied activities.	4,137	1,695	5,732	3,049	700	3,749
Mining and quarrying	5,269	3,106	8,375	771	137	908
Secondary	12,916	1,122	14,038 (3.68)	19,869	1,681	21,550 (6.66)
Manufacturing household	5,494	845	6,339
Manufacturing other than household	10,470	754	11,224	12,054	564	12,618
Construction	2,446	368	2,814	2,321	272	2,593
Tertiary	35,802	10,932	46,734 (12.23)	40,903	4,671	45,574 (14.08)
Trade and Commerce	10,626	1,050	11,676	18,414	1,063	19,477
Transport, Storage and Communications	2,312	28	2,340	4,025	113	4,138
Other Service	22,864	9,854	32,718	18,464	3,496	21,959
Total	2,31,413	1,50,629	3,82,041 (100.00)	2,71,157	52,492	3,23,649 (100.00)

*Source : Director of Census Operations, Madras.

Note.—The occupational division of 1961 is not comparable with that of 1971 since the concept of 'worker' adopted in the two censuses are different.

The present structure of employment as per 1971 figures indicates that the primary sector has in its fold nearly 79 per cent of the total labour force. This is fairly high when compared to the Tamil Nadu figure of 65 per cent of the labour force being engaged in primary activities. The secondary and tertiary sectors account for about 6.7 per cent and 14.1 per cent of employment in the district against 15 per cent and 20 per cent respectively in Tamil Nadu.

Employment in the Organised Sector.—Employment in the organised sector is often given special importance as it offers continuity, security and a fair return to the workers. It is estimated that at the end of the fourth plan, i.e., by March 1974, Pudukkottai accounted for less than 1 per cent of the total employment in the organised sector in Tamil Nadu and judged by any standard this is not a very impressive figure. The ratio of public sector to private sector employment was roughly about 2.6 : 1 in the district at the end of the fourth plan, whereas public sector employment had increased by more than 3½ times between 1961 and 1974, private sector employment only doubled itself. There was actually, a decline of nearly 14 per cent in private sector employment in the district during the fourth plan period.



Industrywise classification of employment in the organised sector reveals that by and large services account for most of the employment followed by manufacturing, construction, transport, communication and others. In the public sector services accounted for nearly 65 per cent of the total employment at the end of the fourth plan and this has been a consistent feature over the plan periods. Under the private sector, employment in manufacturing has steadily increased since 1961 and this accounted for more than two thirds of private sector employment at the end of the fourth plan. In terms of employment, manufacturing is of little importance in the public sector of the district.

A comparative analysis of the industrywise classification of employment in Pudukkottai with that of Tamil Nadu at the end of the fourth plan reveals that there is a more balanced distribution among industry groups at the State level than at the district. For Tamil Nadu as a whole about 40 per cent of organised sector employment was found in services with nearly 27 per cent in manufacturing, 12 per cent in transport and communication and the balance almost equally distributed among the other categories. But at the district level organised sector employment was heavily leaning on services which accounted for nearly 52 per cent of the total organised sector employment in 1973-74. Manufacturing claimed only 21 per cent of the total organised sector employment in the district. It would be desirable to have the structure of organised sector employment in the district altered in favour of manufacturing industries. This would become possible only if steps are taken for the establishment of at least a modest industrial complex in the district. Such an endeavour would also result in the generation of further employment by activating induced investments in the related fields.

The wide canvas of public sector covers establishments and organisations run by union Government, State Government, Quasi-Government and Local bodies. Particulars regarding employment by these different agencies are available in proper form only for the year ending March 1974. As on this date, out of the total employment of 8,768 persons in the public sector nearly 88 per cent were found in State Government and Local Bodies. State Government

organisations employed 3,694 persons and local bodies 3,996 persons. The remaining 1,078 persons were almost equally distributed between Union Government and Quasi Government establishments.

Unemployment in the District.—Estimation of the actual unemployment position is beset with a number of difficulties. Employment exchange statistics are the only official source of information. There is one employment office in the district in Pudukkottai town. During 1974, 9,139 persons were registered at this exchange of whom 828 were given placement in different jobs. The percentage of placements to total job-seekers in the district worked out to 9.06 during 1974. There were 11,893 job seekers in the live register of Pudukkottai exchange as on 31st December, 1974. This includes uneducated job seekers and educated matriculates, undergraduates and graduates in arts, science, commerce and education.

There were 5,555 educated job seekers in Pudukkottai district at the end of 1974 and they accounted for nearly 46.71 per cent of the total number of job seekers in the district. If only educated job seekers upto the level of the graduates in arts, science, commerce and education are taken into account, it can be observed that Pudukkottai district had only 1.73 per cent of the total educated job seekers in Tamil Nadu at the end of 1974.

DISTRIBUTION OF JOB SEEKERS BY EDUCATION LEVELS (AS ON 31ST DECEMBER 1974.)¹

Serial numb and Educational Level.	Number registered during the year.				Number placed during the year.				Total number on the live Register as on 31st December 1974.			
	Men.		Women.		Men.		Women.		Men.		Women.	
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1 Matriculates	4,125	814	4,939	235	62	297	3,212	614	3,826			
2 Persons who passed P.U.C./Under graduates.	465	97	562	43	7	50	817	295	1,112			
3 Graduates.—												
Total—	525	66	591	92	6	98	516	101	617			
(i) Arts	128	20	148	33	1	34	196	28	224			
(ii) Science	166	22	188	40	3	43	175	36	211			
(iii) Commerce	70	12	82	12	1	13	92	12	104			
(iv) Engineering Technology .. .. .	..	..	..	..	..	..	..	..	..
(v) Agricultural .. .. .	..	..	..	..	..	..	..	..	..
(b) Others .. .. .	..	..	..	..	..	..	..	..	..
(c) Total .. .. .	..	..	..	..	..	..	..	..	..
(vi) Medicine .. .. .	..	..	..	..	..	..	..	..	..
(vii) Veterinary .. .. .	..	..	..	..	..	..	..	..	..
(viii) Agriculture .. .. .	..	..	..	..	..	..	..	..	..
(ix) Law .. .. .	..	..	..	..	..	..	..	..	..
(x) Educational	161	12	173	7	1	8	53	25	78			
Total ..	5,115	977	6,092	370	75	445	4,545	1,010	5,555			

¹Source : District Employment Officer, Pudukkottai.

CONCLUSION.

Accelerated development of backward areas with a view to reducing regional disparities has repeatedly been stressed as one of the broad objectives of national planning. An essential pre-requisite for such accelerated development is the evolution of a specific strategy based on a careful identification of the causes of backwardness as well as the potential available for development. The formation of the district as a separate administrative unit in 1974 would help in arriving at such a strategy.

Specific measures have also been undertaken since the formation of the district to accelerate the tempo of economic activities in this region. The promotion of agriculture in the region would mainly depend on the improvements to the irrigation system. It appears that the surface water is being fully utilised and that there is not much scope for improvements to tank irrigation in the district. The other alternative would be to exploit the groundwater resources. This together with the measures to improve agricultural extension and training and larger distribution of quality inputs would place the agricultural sector of the economy on a fairly sound footing. In addition to this, concentrated efforts at increasing the area and yield of cash crops like groundnut and cashew, which are fairly well suited to the soil of this region, would instil a commercial, 'motive' among the farmers and also help the establishment of non-agricultural activities by creating a sound market base.

Development in the strict sense implies changes in the structure of outputs and in the allocation of inputs by sectors. Judged from this angle, strengthening the industrial base of the district becomes a basic pre-requisite for development. Market forces have generally operated in favour of the already developed regions and the economies of agglomeration, size and specialisation have accentuated the trends widening the inequalities between the developed and backward regions. The State has taken up the role of being the pioneer in the industrial development of backward regions and with this in view the agencies of the State Government have laid out concrete proposals to establish four large scale industrial units in the district. By way of offering incentives to the private sector

to supplement the efforts of the Government, the Union and State Governments have outlined specific proposals. These include a Central Government 'outright' grant or subsidy of 15 per cent on eligible fixed assets to the new entrepreneurs, provision of factory space by the Small Industries Development Corporation at four strategic locations, facilities for hire purchase of machinery and worksheds, procurement and distribution of raw materials, offering technical consultancy services and provision of marketing facilities. These incentives would create an atmosphere for greater participation of the private sector in the plans for the industrial advancement of this district. Judged by the criterion of resource availability there is scope for the promotion of industries based on groundnut and cashew in this region. The mineral and marine base for industrial development at present are not very strong in the district. However, with the efforts contemplated by the Fisheries Department to increase the volume of fish landed, there would be scope for setting up fish processing units.

*Select Economic Indicators for Pudukkottai District
and Tamil Nadu.*

Indicators.	Pudukkot- Tamil tai Nadu. district.	
(1)	(2)	(3)
<i>General.</i>		
1 Population (in lakhs)	9.47	411.99
2 Population Density per Sq. Km.	203	317
3 Decennial population growth rate (1961-1971).	26.1	22.3
4 Percentage of rural population to total ..	87.86	69.74
5 Percentage of urban population to total ..	12.14	30.26
6 Literacy (as percentage of total population) ..	31.40	39.46
7 Percentage of workers to total population ..	34.16	35.78
8 Percentage of cultivators and Agricultural labourers to total labour force.	77.82	61.71
9 Percentage of industrial workers to total labour force.	5.86	13.38

Source: Director of Census Operations, Madras based on 1971 Census Reports.

<i>Indicators.</i>	<i>Pudukkottai district.</i>	<i>Tamil Nadu.</i>
(1)	(2)	(3)
<i>Infrastructure.¹</i>		
(a) Total Road length per 100 Sq. Kms. of area (Kms.)	58.7	65.6
(b) Route length of railways per 100 Sq. Kms. of area (in Kms.)	1.81	2.89
(c) Per capita annual consumption of electricity (units).	..	..
(d) Percentage of towns and villages electrified ..	97.4	93.4
(e) Percentage of hamlets electrified	96.3	83.1
(f) Motor vehicles per lakh of population ..	85	310
(g) Population per bank office (in 000's) ..	28	23

Agriculture.²

(a) Percentage of cropped area to total geographical area.	49.25	58.74
(b) Percentage of area sown more than once to total geographical area.	3.14	9.94
(c) Percentage of gross area irrigated to gross cropped area.	48.75	48.0
(d) Percentage of area irrigated more than once to gross cropped area.	4.24	11.23
(e) Number of pumpsets energised	6,459	6.49 (lakhs)

Industries and employment.³

(a) Number of factories	27	6,245
(b) Total factory employment — .. .	1,875	4.67 (lakhs)
(c) Number of registered small scale units ..	332	42,616

¹ Sources for Pudukkottai district: Draft chapter on Agriculture and Small Industries Service Institute Report on 'Techno-Economic Survey of Pudukkottai March, 1975. For Tamil Nadu: 'Tamil Nadu—An Economic Appraisal' 1975.

² Source: Draft chapter on Agriculture.

³ Source: Small Industries Service Institute, 'Techno-Economic Survey of Pudukkottai, March, 1975.'

CHAPTER X—GENERAL ADMINISTRATION.

The Government's administrative apparatus plays a major role in the control and directions of our district's life.

The concept of governance has changed greatly since the days of simple 'law and order' administration. The district administrative machine is much more elaborate and complex today than it was.

In this chapter the origins and growth of the general aspect of our present system of administration are dealt with. The structure of the administrative machine and its methods of functioning, its problems and future scope are also discussed.

Ancient Administrative Divisions and Bureaucracy.—The earliest inscription¹ found in the Pudukkottai region which has been assigned by Buhler to the second or third century B.C., contains references to ancient administrative divisions of the Tamil land including Pudukkottai as *nadus*. This stone legend indicates the existence of a relatively organized system of administration in these parts, even in the decades preceding the Christian era. The system can be seen, through the medium of other inscriptions, becoming more sophisticated in subsequent centuries.

S. Radhakrishna Aiyar informs us:² "We find from inscriptions and the documents relating to Karala Vellalars that these parts were divided into kootrams (கூட்டும்) or divisions as also into *valanadus* and *nadus* (sub-divisions). The divisions into *kootrams* must have been made when these parts formed a portion of the Pallava dominion." He also quotes from T. A. Gopinatha Rao's *History of the Cholas*: "The head of a *Nadu* was called *adhikari*. He would attend to the collection of taxes in the *nadu*, to the administration of justice in the *nadu* and to other matters. These villages had each a separate *sabha* or assembly of men who were given the authority of dealing with affairs relating to the village. The king directly dealt with the *sabhas* (and the *adhikari* had no control over them). There were also *sabhas* in smaller hamlets. Though the *sabhas* of the hamlets dealt with their affairs, it may be presumed that they were subject to the *adhikaris* of the *nadu* in which the hamlets were situated."

¹ P.S.I. number 1 at Eladippattam, Sittannavasal.

² Page 75 of *A General History of the Pudukkottai State*: (1916):

Two Pudukkottai inscriptions selected at random indicate the increasing diversification and consolidation of the ancient administrative system:

1. *Inscription No. 59.*

Place.—Tirumayam Taluk—Nerinjikkudi—On a slab set up on the bund of the Nerinjikkudi tank.

Dynasty and King.—Chola—Parakesarivarman.

Date.—Fifteenth year of the King (922 A.D.)

“Hail! Prosperity! 15th year of Ko-Parakesarippanmar (King Parakesarivarman). In this year, the terms on which paddy is to be paid according to agreement for the tank at Nerinjikkudi in the Ollaiyur *kurram* (division), by Ponnandi of Ulakkudi (village) of Kunru-irukkai-nadu (district) in Pandi-nadu (province) are as follows: From the interest accruing from this amount of paddy. . . . We, the residents of the village of Nerinjikkudi, received this gift on these conditions.”

2. *Inscription No. 151.*

Place.—Kulattur Taluk—Kudumiyamalai—Sikhanathasvami temple — on the north wall of the second *prakaram*.

Dynasty and King.—Chola—Tribhuvanacakra-vartikal Sri Kulottunga Cola Devar—Parakesari Kulottunga III, 1178–1223 A.D.

Date.—Eighteenth year, 195th day — Corresponding to 1195–96 A.D.

“Hail! Prosperity! In the 18th year, on the 195th day, of Tribhuvanacakra-vartikal Sri Kulottunga Cola Devar: In order to provide for the food offerings, including cooked rice, vegetables, and other sorts of food,¹ during the *tiruppalli elusci sandhi*² of the Periyanaicciyar³ in the temple of the Nayanar, the Lord who abides in Tirunalakkunram in Kunrusul nadu of Irattapadikondacolavanadu, and stipulating that this shall continue as a daily item of service⁴ for so long as the moon and sun endure, I, Kulottunga

¹ *amadupadi, kariyamudi and vinjanangal.*

² Service in the dawn when the aubade is sung to awake the deity.

³ Literally ‘great goddess’, the consort of the Nayanar.

⁴ *Nittal nmandamaka.*

Cola Kadambarayan, also called Tannan Edirilapperumal the *sakaraaraiyan*¹ of urattur Kurram of this *nadu*, hereby gave, as *kudininga devadanam*,² the following lands which are entered in the *puravu* register of Alagiyanavalaccaruppedimangalam³ also called Sri Kaitavan-Kaitavan,⁴ and which lie to the north of the *taliparru*⁵ lands of Narpattennayira Nambi also called . . . ya . . . Singattu-ranga . . livan, native of Adanur, namely the Pidakaipuduvayal lands measuring 1 *ma*, and Kudalur Kilavayal measuring 1 *ma*, totalling in all lands measuring 2 *mas*.

Having had the *tirucculakka*⁶ planted on the boundaries of these two *mas* of land thus conveyed, and stipulating that this Narpattennayira Nambi himself shall pay, as long as the moon and sun endure, the *irai*⁷ *kudimai*⁸ and taxes of every other kind fixed in accordance with the *varisai*⁹ of this village, I, Kulottunga Chola Kadambarayan, gave this inscribed on stone. This is the signature of Kulottunga Chola Kadambarayan, the signature of the *olai*,¹⁰ the signature of Nambiyandan. May this be under the protection of all Mahesvaras".

These two inscriptions indicate geo-administrative divisions, a bureaucratic hierarchy, the concept of State revenue, and a village community run along organised lines of self-government. It must be said to the credit of the early Tamils that lived in these parts that these institutions continued for several centuries after the beginning of the Christian era. One of the reasons for this successful continuity was the relative freedom from alien influences or aggression enjoyed by the region. This enabled the people to lead their lives and play their roles in the village community without undue disruption.

1 *Sar-araiyan-an araiya* Chief who is the viceroy or administrator of a *nadu*.

2 Lands conveyed as free gift to God, without evicting the original tenants.

3 Alagiya-manavala-Caturvedimangalam-Caturvedimangalam was a brahmin village which is a brahmadeyam to brahmins versed in the four *vedas*.

4 Sri Kaitavan Kaitavan—Kaitavan is the title of the Pandyas. This is the old name of the modern village Kadavampatti which is a corruption of Kaitavanpatt.

5 Double crop lands.

6 Boundary stone marked with a trident denoting lands of a Siva temple.

7 Royal tax.

8 Tenancy dues-rent payable to the land lord.

9 The fiscal rates prevailing in the village.

10 Secretary.

As external influences began to work upon the indigenous system of administration in the Tamil land, it started undergoing changes. The ascendancy of the Nayaks at Madurai in 1559 and the growth of Maratha influence at Tanjore from 1674 modified the administrative system in those parts of the Tamil land as were under their control. Muslim influence under the Carnatic Nawabs exercised a similar influence later.

By 1736, the year that saw the end of Nayak rule at Madurai at the hands of Chanda Sahib, only three small powers were left in the Tamil country: the Raja of Tanjore, the Tondaiman of Pudukkottai and the Setupati of Ramnad. The political subordination of these powers to the Nawab had been camouflaged by the loose term 'allies'—an arrangement that assisted their survival. Of these external influences, Nayak, Maratha and Muslim, that which influenced the general administration in Pudukkottai State the most was the Maratha. This influence came not directly but through the medium of the British presence in India. The Pudukkottai State felt this influence for the first time when the responsibilities of superintendence in Pudukkottai were assumed by Captain (later Major) Blackburne in 1807. Blackburne, then the Resident at Tanjore, took over as Political Officer of Pudukkottai State in the February of 1807. And in his wake came a number of Maratha Brahmin families. One Anantayya, a servant of the British Government, was appointed *karyast* or agent "to exercise all the authority of the Raja Bahadur under the superintendence of the Resident." Radhakrishna Aiyar says¹ "...It was about this time that the accounts of the State were required to be kept in Maratti, which required men knowing Maratti and Maratti systems of accounts to be appointed. The power was thus transferred into the hands of the Marattas and most of the offices, high and low, were filled by the Marattas till about 1875."

But like the banyan tree which can cease to 'stand' on its central trunk relying, instead, on its several branches that strike independent roots, the British system of administration in Pudukkottai became, over the years, less Maratha and more British. By the end of the

¹ Page 264 of *A General History of the Pudukkottai State*: (1916).

nineteenth century British administration as it obtained in the States was in full control of Pudukkottai. The pattern was familiar enough. The transfer of power to British hands, which had been plain and direct in other parts of the Tamil territories, were a distinctly 'behind the scenes' look in the princely States.

"Ever since the days of Hastings," writes¹ Asok Chanda, "the influence of the Company over the internal administration of the States had steadily increased and the Company's Residents were gradually transformed from diplomatic agents, representing a foreign power into executive and controlling officers of a superior government." He adds: "This position was continuously maintained, although, with the passage of time, the authority and power of the Residents and Political Agents were no longer flagrantly displayed but exercised with subtlety and imagination. The infiltration of British authority was otherwise a perceptible process." British influence never found it difficult to penetrate the 'native' State's mould in Pudukkottai. Both the attitude of the rajas and natural events greatly helped this process. The fact that when Blackburne took over, the Tondaiman raja vijaya Ragunatha Raya, was a minor, pre-determined a paternalistic mission to the British arrival in Pudukkottai. Blackburne, under the circumstances, was to undertake both the management of Pudukkottai and also be the minor kings' guardian. The immediately visible result of this Tanjore-based administrator's take over, was a Maratha-ization of the institutions of government in Pudukkottai. The Maratha institution of Sarkil² (chief administrative officer) came into prominence during this period. Venkappayyar was the first to hold this post, while Anantayya functioned as the Karyast or agent. Sairoba Naig, an officer of Tanjore, became Sarkil in 1822. Although Sairoba Naig was not a very assertive incumbent, the post gradually became the key post in the State. Next in importance was the Karbar or revenue collector.

A question may be asked here. When the British were able to go ahead almost unchecked with their plans of expansion and

1. Pages 17--18 of *Indian Administration* (1958).

2. The term means according to Wilson's *A Glossary of Judicial and Revenue Terms* (1855), "a minister, a chamberlain, a major domo". The word is, no doubt a derivation of the Marathi designation or title *Sarkhel* conferred by the Peshwa,

consolidation, how was it that several States, some of them as small as Pudukkottai, were allowed to retain a separate identity at all? The answer does not lie very far. For maintaining this plurality of political units the British had a good reason. In spite of the diversities in the country, an impressively united protest against the foreign rule had been staged in 1857. Although the British appeared not to attach it much importance (by, among other things, calling it the 'Sepoy Mutiny') it had shattered their nerves. They realized the importance of retaining such goodwill towards British administrative institutions as was found among people in the territories which had not yet passed under their direct rule. Ruling through these institutions was relatively safer, provided the princes accepted their suzerainty, and settled down to a position of 'protected' political subordination. In allowing these States to continue as they were, the British were adopting a prudent means of perpetuating their rule. Asok Chanda writes¹: "The deliberate process of a gradual absorption of the States, with or without provocation, might have changed the configuration of India and removed what subsequently developed as the problem of Indian States. But this policy of annexation came to be halted by the outbreak of 1857. During this upheaval, which shook the very foundation of British authority in India, the Princes stood, in the words of Lord Canning, as a break-water in the storm which would have swept over us in one great wave". Although the 'Sepoy mutiny' passed without much of a south Indian involvement, the continuance of the Pudukkottai and other Madras States, came to be guaranteed by the British Crown on the terms devised on the occasion.

For the purpose of local administration the British divided the country into districts and placed them in the overall charge of an English Collector. The Collector became a plenipotentiary within his district. He symbolized the autocratic government in the centre. Haridwar Rai describes² the arrangement 'thus: "During the decade following the 'mutiny', an impressive political-administrative structure was forged in India whose essence lay in

¹ Page 17 of *Indian Administration* (1958).

² Page 489 of the *Indian Journal of Public Administration* Vol. XVI No. 4 October-December 1970.

a series of one-man authorities, one subordinate to another, each responsible for the administration of the area in his charge. The District officer was a crucial rung in the hierarchical ladder in the structure ; he served as a channel of communication, upward and downward, from the Governor-General down to the people, represented total executive power of government, achieved co-ordination of all its field activities, and acted as ' the administrative-maid-of-all-work ' being responsible for everything pertaining to the life of the people in his charge. Indeed, until the paternalistic elements in the structure of field administration declined by the beginning of the second decade of the present century, the district officer was the government to the simple village people of his district, and it was this belief more than anything else, which made them look upon him as a giver of all favours and dispenser of justice. If the Viceroy was the symbol of the Crown in India, it was the district officer who was the seat of authority so far as the mass of the people were concerned ".

While in British India power was exercised through English Collectors, the States were governed through the Political Agents or Residents. Though they were supposedly unconnected with the direct internal administration of the States they actually had the final say in all administrative matters.

It was in these rather halcyon times for the British in India, with the ' mutiny ' safely behind them, that an administrator steeped in the bureaucratic traditions of the Raj came to Pudukkottai as Sarkil. Sir A. Sashiah Sastri had put in 24 years of ' meritorious ' government service before accepting the Pudukkottai post in 1874. On the 1st July, 1855, at his instance, the designations of Sarkil, Karbar and Deputy Karbar were changed to Diwan, Diwan Peishkar and Deputy Peishkar, respectively,—terms that were more familiar to British and British Indian ears.

The mode of administration in Pudukkottai after the mutiny differed from that in the other British districts only in the higher strata of the administrative echolons. Instead of a Collector and Secretaries to Government there was the Karbar and Diwan or Superintendent. But in field administration there were the same Tahsildars and revenue inspectors as in British India. The patented

British clerk-oriented system of office administration and the total dependence on village officers marked the Pudukkottai hierarchy. The Diwan continued to be the chief administrator of the State until 1898. In 1899, Rajkumar Vijaya Raghunatha Dorairaja became Councillor, putting an end to the one man show of the Diwan. When G.T.H. Bracken, I.C.S., joined as the first Superintendent of the State in 1909, both Diwan and Councillor were reduced to second and third place respectively.

This arrangement continued until October 23, 1922, when, Vijaya Raghunatha Dorairaja became Regent. The regency ended on 28th February 1929 and was replaced by a Council of Administration. In November 1931, B.G. Holdsworth, I.C.S., became Administrator. The direct participation of I.C.S. officers in the administration of Pudukkottai continued till the last British officer in Pudukkottai, Tottenham, died in 1946. It will thus be seen that a close and vigilant control was exercised by British or British-trained officers in Pudukkottai for more than 25 years before independence. Their word counted for more than that of anybody else in the State. The administration in Pudukkottai had thus a 'native body but a British soul'.

The germ of the word 'administration' lies in the Latin 'ministrare' which means 'to serve'. The methods of the bureaucratic machine created under British rule, in whose hands the administration of this country rested for more than two centuries, however, gave a different image to this term in the minds of our people. Administration came to denote "the organization and direction of human and material resources to achieve desired ends¹. During the early days of the Raj, these 'desired ends' were not to be determined by the will of the people of our country. They were conceived by the British and, quite naturally, subserved the strengthening of British power in India. A gulf between the aims of administration and those of the public was inevitable, alienating the administrators from the people. But the range of communication among the people was small then: Social problems had not found articulation, the aspirations of the people remaining largely inhibited. The accepted responsibilities of the State were accordingly nominal.

¹ Paffner quoted on page 3 of *Public Administration* (1966) by A.R. Tyagi.

Concessions for people's participation had to be wrenched by a continuous struggle. The Government in British India until 1919 was the quintessence of a unitary and centralizing concept of government. The period from 1919 to 1947 witnessed a tedious long-drawn struggle by which the character of the administration was slowly changed by the inclusion of the representatives of the people and decentralization of power. This process which culminated in the independence obtained in 1947 saw many stages, the description of which may be unnecessary here. It is only important to note that a unitary central government, manned by foreign people, began gradually to be transformed into a government that was more representative of the people.

The Pudukkottai administration was, if anything, somewhat more begrudging in the matter of people's participation than British India. Pudukkottai's government was purely bureaucratic until 1902. Even in British India, the Indian Councils Act of 1861 had provided for the nomination of non-official members. The Indian Councils Act of 1892 had enlarged the size and power of the central and provincial legislatures and permitted them to criticise the financial proposals of the Government and to ask questions. But in the Pudukkottai State it was only in 1902 that the first Representative Assembly was formed. All the 30 members were to be nominated by the Government. In 1907 three-fifths of the number of seats were filled by election. The Assembly met once a year, when the Darbar read out to it a statement of progress in the administration. The Darbar also answered questions from the members. The Assembly discussed matters of general importance and invited the attention of the Darbar to them.

In 1915, a Legislative Advisory Council was formed. It consisted of the members of the State Council, the State Vakil, two members elected by the members of the Representative Assembly, and two members nominated by the raja. In 1919-20, the number to be elected by the members of the Representative Assembly was increased to four. This was a purely advisory body.

On the 29th of September, 1924, Pudukkottai acquired a Legislative Council of fifty members, which replaced both the Representative Assembly and the Legislative Advisory Council. Thirty five

members were elected to this council and fifteen were nominated. Of the nominated fifteen, there were ten officials and five non-officials. Nominated non-official members included a member of the Adi-Dravida Community and an Indian Christian lady. The voting right was given to those who had resided in a constituency for not less than 100 days and satisfied any one of the conditions prescribed on the basis of property, income, education, etc.

Initially Pudukkottai had lagged behind British India in the association of the people in administration. But by the eve of independence, this was not so. When the State merged with the Indian Union, on the 3rd March 1948, it was in a position to bring with it a people who were not strangers to the administration and governance of their land.

Changes after Independence.—With independence came the question of the nature of the Indian States, which were in different levels of social, economic and political development. Referring to this, Asok Chanda says¹ : “The principle that while that sovereignty is divisible independence is not, was wholly applicable in the case of the Indian States. While enjoying a measure of sovereignty they did not have any of the accepted attributes of independence. The contention of the Congress that there could be no question of the Indian States attaining independent status on the lapse of paramountcy had thus both a logical and a legal basis. But the British Government disregarded this point of view and reassured the Princes once again in 1947, that even though power would be transferred to two successor authorities, the British Government would adhere to its earlier decision and paramountcy would lapse on the appointed date of August 15, 1947. This assurance, however, was deprived of all meaning by the compulsion of events, and the Viceroy himself gave no encouragement to the Princes to pursue an untenable theory of independence when he made it clear that there was no intention of allowing any Indian State to enter the Commonwealth separately as a Dominion”. This, coupled with the strongwill and strategy of Sardar Vallabhbhai Patel, free India's Deputy Prime Minister in charge of the Ministry of States, made the integration of all ‘native’ States with the Indian Union an inevitability.

¹ Page 21 of *Indian Administration* 1958.

Pudukkottai, like most of the States, presented no great problem in merging with the Indian Union. The Raja agreed to the advice of Sardar Patel, that "both in the interests of the people and himself, His Highness should merge his State with Madras Province." Accordingly, the merger took place on 3rd March, 1948. V. V. Subramanian, the Collector of Tiruchirappalli district took over the administration on the appointed day. V. N. Kudva, then First Member, Board of Revenue, visited Pudukkottai and after talks with officials and non-officials recommended that the former State "may be converted into a revenue division with Pudukkottai as headquarters and that it may be added to the existing Tiruchinopoly district." ¹ Though there were appeals from several corners for turning Pudukkottai into a separate district, it continued as a revenue division of Tiruchirappalli district until the 14th January, 1974, when it became a separate district. After merger, the departments of the erstwhile State were absorbed in the respective departments, without any violation of the service conditions of the ex-employees of the Pudukkottai State. Minor difficulties in the absorption of the old administrative set-up were gradually eliminated. All the three taluks of the erstwhile State remained as they were, forming the Pudukkottai revenue division.

The New District.—The Government of Tamil Nadu in 1973 appointed Thiru S. P. Srinivasan, I.A.S., a Member of the Board of Revenue who had earlier served as Sub-Collector, Pudukkottai, to tour the area and send a report to Government on the subject of giving Pudukkottai district status. He informed the Government "Ever since Pudukkottai State was merged with the then Madras State in 1948, the local people have been clamouring for a separate district with Pudukkottai as headquarter." The Government examined his report and decided to concede the long felt aspiration of the people of the Pudukkottai area, and announced on 30th November 1973 that a Pudukkottai district with headquarters at Pudukkottai will be created with effect from the 14th of January 1974, comprising the existing areas in the Pudukkottai Revenue Division and by transferring certain adjoining areas from Thanjavur

¹ Board's Proceedings Mis. 609 (confidential), dated 3rd May 1948,

District. Thiru C. Ramdas, I.A.S., who was appointed Special Officer for making preparatory arrangements for the district's formation became the new district's first Collector.

The Government directed that Pudukkottai Revenue District be constituted with the following areas :—

(a) Existing Revenue Taluks in the present Pudukkottai Revenue Division, viz., Taluks of Alangudi, Tirumayam and Kulattur, with the present Sub-taluk of Pudukkottai (Pudukkottai sub-taluk is to be upgraded as a main taluk).

(b) Arantangi Taluk, including Avudayarkoil Dependent Sub-taluk in Thanjavur District, will be transferred and added to the Pudukkottai District.

(c) Gandharvakottai and Kallakottai Revenue firkas in Orattanad Taluk in Thanjavur District will be transferred and added to the upgraded Pudukkottai Taluk in Pudukkottai District.

(d) Five revenue villages in Vallam Firka in Thanjavur Taluk in Thanjavur District will be transferred and added to Gandharvakottai Firka in Pudukkottai Taluk in Pudukkottai District.

(e) Twenty-three revenue villages in Keeramangalam firka in Pattukkottai Taluk, Thanjavur District, will be transferred and constituted as a separate Revenue firka called the 'Keeramangalam firka' and attached to Alangudi Taluk in Pudukkottai District.

(f) Seven revenue villages in Perumagalur Firka in Pattukkottai Taluk, Thanjavur District, will be transferred to Arasarkulam firka in Arantangi Taluk, Pudukkottai District.

(g) Alangudi Taluk will consist of five revenue firkas, viz (1) Alangudi, (2) Karamakkudi, (3) Melaiyur, (4) Vallanadu and (5) Keeramangalam.

(h) Pudukkottai Sub-taluk will be upgraded as main taluk. The upgraded Pudukkottai Taluk will comprise of four revenue firkas, viz., Pudukkottai, Varappur, Gandharvakottai and Kallakottai.

(i) There will be two Revenue Divisions, one will be Pudukkottai Revenue Division, with Headquarters at Pudukkottai, comprising of Kulattur and Pudukkottai Taluks. The other will be Arantangi Revenue Division, with Headquarters at Arantangi, comprising of Tirumayam, Alangudi and Arantangi Taluks.

The two revenue divisions are headed by revenue divisional officers and the five taluks by Tahsildars.

The Administrative Reforms Commission set up by the Government of Tamil Nadu has observed in its *Report on District Revenue and General Administration* (1973) ; "The District Collector has traditionally been regarded as the representative of the Government in the district. The office has always commanded prestige within the district. The collection of land revenue and the preservation of law and order were his major responsibilities during the British period. He co-ordinated in a general way the work of departments servicing farmers such as Public Works, Agriculture, Forests, Animal Husbandary, etc., and also exercised a measure of control over Local Boards. He took command of difficult situations like floods, famine, epidemics, etc., and organised relief measures on his own initiative pending formal sanction by the Government. The fact that he was invariably a member of the Ruling Race till the First World War and often so, even thereafter, enabled him to exercise unchallenged authority over departments staffed by the Ruled. The role of the Collector has been changing after Independence as it was bound to and is getting stabilised gradually in the present form. He could no longer lay down the law as of old, for there is no common bond between himself and the new Rulers. Even in enforcing existing laws, the measure of his success depends on the extent to which he could take the people with him. Administration by consent as distinct from Administration by compulsion called for qualities of a different order-clear insight on the ways of thinking of the people, sympathetic appreciation of their needs and dedication and drive in meeting them. Land Revenue has ceased to be of much significance. Law and order is still a problem, rendered more difficult by political parties taking their differences into the streets. But, his major pre-occupation now is economic development, in implementing the many welfare schemes forming part of the National Plan. He is expected to assume leadership

and co-ordinate the work of district officers of the various development departments such as Agriculture, Animal Husbandary, Irrigation, Power, Industries, Health, Education, Communication, etc. As Chairman of the District Development Council he should review the work of these departments in association with the elected representatives of the people and pull up such of them as were found to be slovenly. And this horizontal co-ordination has to be effected without appearing to subordinate technical men, to the will of the generalist."

The Collector of Pudukkottai is assisted by the following officers at district level :—

1. Personal Assistant to Collector (General).
2. Personal Assistant to Collector (Development).
3. Personal Assistant to Collector (Election).
4. District Supply Officer.
5. District Harijan Welfare Officer.
6. District Backward Class Welfare Officer.
7. District Small Savings Officer.
8. Assistant Engineer (Harijan Housing Development Corporation).
9. Project Officer (Small Farmers Development Agency).
10. Assistant Director of Survey and Land Records.
11. Authorised Officer (Land Reforms).
12. Special Deputy Collector (Burma Repatriates).
13. Revenue Divisional Officers, Pudukkottai and Arantangi.

All the Personal Assistants exercise authority only under powers delegated to them by general or special orders. District Development Officers assist the Collector on Panchayat Development, while the District Welfare Officer assists him in welfare programmes for Harijans and Backward Classes.

Other important district level officers are :

<i>Designation.</i>	<i>Number of posts.</i>	<i>Department to which he belongs.</i>
(1)	(2)	(3)
1. District Sessions Judge ..	1	Judicial.
2. District Treasury Officer ..	1	Treasury.
3. District Medical Officer ..	1	Medical.
4. District Women's Welfare Officer.	1	Social Welfare
5. District Commercial Tax Officer.	1	Commercial Tax.
6. District Statistical Officer ..	1	Statistical.
7. District Educational Officer ..	1	Education.
8. District Registrar	1	Registration.
9. District Transport Officer ..	1	Transport.
10. District Development Officer.	1	Rural Development and Local Administration.
11. District Employment Officer	1	Employment and Training.
12. District Public Relation Officer.	1	Public and Information.
13. District Superintendent of Police.	1	Police.
14. Principal, His Highness the Rajah's College, Pudukkottai.	1	Education.
15. Principal, Kalaignar Karunanidhi Government Arts College for Women.	1	Education.
16. Principal B.T. College, Pudukkottai.	1	Education.
17. Inspector of Factories ..	1	
18. District Forest Officer of Tiruchirappalli Regional Manager, Forest Development Corporation.	1	Forest.

<i>Designation.</i>	<i>Number of posts,</i>	<i>Department to which he belongs.</i>
(1)	(2)	(3)
19. Municipal Commissioner, Pudukkottai.	1	Local Administration.
20. Executive Engineers... ..	2	Public Works Department.
21. Assistant Director of Animal Husbandry.	1	Animal Husbandry.
22. Deputy Registrar of Co- operative Societies.	2	Co-operation.
23. Assistant Commissioner, Hindu Religious and Charitable Endowment, Pudukkottai.	1	Hindu Religious and Charitable Endow- ments.
24. Divisional Engineer, High- ways and Rural Works.	2	Highways and Rural Works.
25. (a) District Agricultural Officer, Pudukkottai, Arantangi and Anna Pannai.	3	} Agriculture.
(b) Divisional Agricultural Engineer, Pudukkottai.	1	
(c) Director, Kalaignar Kannanidhi Research Institute.	2	
(d) Project Officer, I.A.D.P.	3	
26. Principal, Indian Industrial Institute, Pudukkottai.	1	Technical Education.
27. Assistant Works Manager, Government Branch Press, Pudukkottai.	1	Stationery and Printing.
28. Assistant Examiner, Local Fund Accounts.	1	Local Fund Audit.
29. (a) Probation Officer, Puduk- kottai.	1	Jails.

<i>Designation.</i>	<i>Number of posts.</i>	<i>Department to which he belongs.</i>
(1)	(2)	(3)
(b) Superintendent, Borstal School.	1	Jails.
30. Assistant Director of Industries and Commerce.	1	Industries.
31. Assistant Commissioner, Agricultural Income-Tax at Thanjavur.	1	Agricultural Income Tax.
32. Assistant Settlement Officer at Pudukkottai.	1	Settlement.
33. Assistant Curator, Government Museum, Pudukkottai.	1	Museum
34. Divisional Engineer, Electricity Board.	1	Electricity Board.
35. Executive Engineer, Tamil Nadu Water Supply and Drainage Board.	1	Tamil Nadu Water Supply and Drainage Board
36. Inspector of Labour ..	1	Labour.

The following are the important officers of the departments of the Government of India in the district :

<i>Designation.</i>	<i>Number of posts.</i>	<i>Department to which he belongs.</i>
(1)	(2)	(3)
1. Income Tax Officers ..	2	Income Tax Department.
2. Superintendent of Excise ..	1	Central Excise Department.
3. Postal Superintendent Class II.	1	Postal Department.
4. Sub-Divisional Officer (Telegraphs).	1	Postal and Telegraph Department.

In the following paragraphs is an account of the general administrative structure of the district, based on the description contained in the State Government's *Hand book on Administration* with the workload falling in the District Collector becoming increasingly heavy and in order to relieve the District Collector of some of his work to enable him to concentrate on Panchayat Development Work, the Government have appointed a District Revenue Officer in most of the districts. Some of the functions of the Collectors relating to Revenue matters have been allocated to the District Revenue Officers.

But Palakkottai, Dharmapuri, Kanyakumari, Nilgiris and Madras districts being small-sized have no district Revenue Officers. The Collector performs the function of the District Revenue Officer also. The two divisions are under the immediate charge (Subject to the Collector's control) of divisional officers designated as Revenue Divisional Officers. The Divisional Officers act as a link between the Collector and the Taluk Officer in the Revenue Administration. The Divisional Officer forms an indispensable part of the Revenue hierarchy. Apart from the substantial original work cast upon a Divisional Officer by the various Acts and Regulations, Rules and standing Orders in matters like Encroachments, Assignments, etc., a lot of Supervisory work has to be done by him by way of inspection of the several branches of a Taluk office and of conducting Jamabandi attending to various local inspections and scrutinising reports of subordinate officers on important subjects. With the introduction of the National Extension Service and Community projects, the Divisional Officer until 1974, co-ordinated developmental activities. The Divisional Officer occupies in the division, in relation to other officers, a position similar to that of a Collector at the District level. He is also responsible for the maintenance of Law and Order in his division and exercises the powers of an Executive First-Class Magistrate within his jurisdiction.

The Revenue Divisional Officers who were responsible at the Divisional level for the successful administration of the Panchayat Development Programme have since 1974 been relieved of this

duty by the newly appointed Development Officers at the divisional level. At the district level, the District Collector is responsible for developmental activities. The Collector is also the Chairman of the District Development Council consisting of the Chairman of all Panchayat Unions, M.L.As., M.L.Cs., M.Ps., and the district's heads of development departments.

The district's five taluks are in the charge of Tahsildars assisted by Deputy Tahsildars. Taluks are the units of District Administration just as Districts are those of State Administration. The Taluk Office is the pivot of the Revenue Administration. It is the basic units for purpose of general administration, Land Revenue and Land Records and the large number of other items of work. It is the office where many basic administrative records are kept and maintained. More than any other office, it is the one which has the closest contact with the population dealing as it does, with the day-to-day revenue affairs of the villages comprised, within it over a wide range of subjects. Tahsildars and Deputy Tahsildars are Executive Magistrates in their respective jurisdiction.

Taluks are divided into firkas in each of which, a Revenue Inspector is in immediate charge of the details of revenue work. Revenue Inspectors constitute a vital link in the Chain of Revenue Administration, for much of the basic material for the disposal of the bulk of administrative business is obtained through them. Each firka comprises a group of villages. The ultimate unit for all fiscal and administrative purposes is the village, the administration of which is being run by the village establishment, consisting of the following types of village officers; village headman, Karnam, Vetti and Talayari.

The village headman is the representative of the Government in the village. It is his duty to collect the revenue dues to the Government from various sources and to remit them into the treasury. He maintains the birth and death Registers. He is the Custodian of all the Government properties in the village to whichever departments they may belong. The karnam of the village accountant is subordinate to the headman and his duty

is to maintain properly the various village accounts. He should keep a complete account of the extent of lands in the village specifying the boundaries and land marks with particulars whether they are arable, cultivated, uncultivated, pasture, house-sites, gardens, porambokes, etc.. The registers also contain particulars of the extent and description of land assessment due to the Government, nature of poramboke lands, etc.. The karnam is expected to register the crops raised in the village monthly and estimate the outturn when the crops are ripe for harvest. He is also to prepare statement showing all the fluctuating items of revenue such as charges levied for irrigation of lands with the aid of the Government channels, tree tax, etc. In fact, he prepares all the village accounts required for arriving at the correct demand of land revenue to be collected in the year.

The Vetti and Talayari are the village servants. The Vetti is a village peon appointed to assist the headman and the Karnam in the discharge of their duties. He is expected to execute processes issued for the collection of revenue and to assist the Karnam in measuring lands, gathering particulars, crops, etc., The Talayari is the village watchman intended for police duties under the direction of the headman.

The Village Officers are the agents of the Government for implementing the Government orders at the village level. They are under the control of the Revenue Department; they are so required to assist officers of all the other departments for the Government. Each village or group of villages has atleast one headman, one Karnam, one or two Vettis and Talayaris. The strength of the village establishment in each village depends upon its beriz (Land Revenue) . area, number of holdings, population, etc..

The challenge faced by the Collector in the management of District Administration has been summed-up by the Administrative Reforms Commission thus: " The volume of work which the Collector should attend to in person, has become so large, that in spite of the assistance he gets from his Personal Assistants he is finding it increasingly difficult to do full justice to them. It

will be impossible for him to exercise personal supervision over the day-to-day work of the 30 Panchayat Unions. At the same time, he cannot control events in the District on the basis of paper instructions as was possible to his predecessors of the British period. He can sustain his supremacy only by keeping his finger on the public pulse. This would require that he should make himself readily accessible and should be on amiable terms with leading men in the public life of his district, including the Chairman of all Panchayat Unions and Municipal Towns and the elected representatives of the people in the Central and State Legislatures. People can no longer be pressurised to follow his lead but have to be enthused to do so by his dedication, zeal, judgement and by the example of his own industry.

The Government of Tamil Nadu has taken specific measures to ascertain the grievances of the people. The days when villagers had to wait at the offices of the Government for hours are gone. Now the initiative is taken by the officials. The Mass Contact Programme, for example, is a scheme according to which the officials make themselves available to the citizens. All the officials make it a rule to allot a specific time for meeting the public. This is adhered to by the Collector and all the officers of the Government. Moreover, a day of the week is set apart by the Collector as 'grievance day' to receive petitions from the public. The presence of other officers at the time of this meeting enables the Collector to make a spot-enquiry of all the cases and ensure quick redressal.

CHAPTER XI—REVENUE ADMINISTRATION.

One area where the involvement of Government has been steadily growing is the area of land ownership and use. From the days when rulers of the Pudukkottai tract made grants of land (or of the State's share) as rewards for charitable purposes, it has been a long journey. The present age has seen the abolition of intermediaries and imposition of land ceilings. From a static instrument for the collection of revenue and the perpetuation of traditional patterns of ownership, revenue administration has become an agency for land and tenancy reforms.

Traditional Tenures.—The use of the term 'tenure' calls for an apology and explanation. S. Sundararaja Iyengar points out¹ : "The application of the term, 'tenure' to Indian landholdings is not strictly accurate. It is essentially a feudal term applied to the system of holding land in subordination to another which in the feudal age constituted the leading characteristic of real property. Feudalism as was prevalent in Europe never obtained in India, and the Indian institutions resembled more the benefices which preceded, than the fiefs which constituted, it. Nevertheless the term, has generally been made use of in Indian nomenclature ; and I have retained that term in the absence of any other suitable one to denote comprehensively the rights and interests in and relating to land, and the relations with respect thereto between the persons entitled to those rights and privileges."

It has been used here for the same reasons. Various systems adopted for the possession, regulation and management of land are covered in the term "land tenure". These have changed with the times to suit social, economic and political exigencies.

But land is a strictly limited source of production that cannot be expanded at will. Transfer from one kind of use to another can be made and productivity increased but the total extent available is beyond significant change. Our country being predominantly agricultural, the revenue administration has depended directly or indirectly on land and its use. The term "land tenure" has accordingly come to mean a system for the possession and manage-

¹ Page 1 of Land Tenures in the Madras Presidency, 1921 by S. Sundararaja Iyengar.

ment of land, mainly for agriculture. This also explains the fact why all land tenure and many things connected with land such as land reforms should usually figure under 'Revenue Administration', even though the amount of land revenue, as it is known in common parlance, has now lost much of its old financial significance.

Whatever be the changes in other fields, land has remained the essential unchanging element of agriculture. It cannot be otherwise. Land and human labour represented by the 'common peasant' represent a complementary relationship and form the real nexus of all land tenures.

To 'agrarian relations', are attributed numerous interpretations. In it are included the relationship of the agriculturist with the landlord or any other intermediary, or with the State, and the relationship of the agriculturists among themselves. It is seldom realized that excluding the institutions introduced and developed by purely social and political influences, there can be only one scientifically valid 'agrarian relation', that is, how the two vital factors of agricultural production: the land and the agriculturist, are connected. All other agrarian relationships are, from a strict agrarian point of view, secondary.

The power with which the various forces of events affect agrarian relationship cannot, of course, be underestimated. In fact, these forces have been so numerous and powerful that they indistinguishably mingle with the strictly agrarian aspects of the relationship and can hoodwink even cautious students and mislead studies of the causation of many problems relating to land and the peasant.

A history of land tenures logically should, therefore, on the one hand, be a description of how the tiller is related to the land upon which he works. And, on the other, be an analysis of the effect of other influences on this relationship.

When agriculture was introduced in Tamil Nadu is a matter of conjecture. But in the light of references to agriculture in *Silappadikaram* and the *Tolkappiam* we may infer that agriculture had developed in Tamil Nadu, including the tract which later came to be known as Pudukkottai, even before the beginning of the Christian era. Presumably, agriculture in the beginning consisted of wandering and shifting cultivation. Stationary villages as centres

of agricultural activity, came later. The land then was abundant allowing a free choice to those who wanted to settle on it. Gradually, a consciousness of proprietary rights, collective and individual over land grew, and ancient governments as they arose began taking a share of the produce.

That agriculture was considered a proud profession in Tamil Nadu is clear from the *Purananuru* which reminds a Chola King that his victories in war were due to the effective agricultural operations and that if he protects the tillers, his enemies will have to worship him. Vellalars who carried on agriculture in Tamil Nadu in those days held a high position in the society¹. Others also might have been there or joined them but the important points are that there was no scarcity of land in this early period, that agriculture, under the circumstances, was the mainstay of the population, and of economic activity as a whole and a source of revenue for the governmental organisations of the time. By the early centuries of the Christian era an agrarian 'system' had evolved itself.

Basing it on a palm leaf manuscript filed as a record in Pudukkottai Chief Court, S. Radhakrishna Aiyar gives the following account of the settlement of the Vellalars within the Pudukkottai State².

"Adondai Chakravarti brought these Vellalars with him (from Kanchipuram) into the tracts subject to the Cholas, and Ugra Peru Valuthi, the Pandya King, selected 48,000 good families and imported them from east Kanchipuram and settled them in the Pandya land. The Cholanadu tract occupied by the Vellalar was called 'konadu' or the land of the king, and the Pandya tract was known as 'Kanadu' or forest land".

While the term 'Konadu' means, literally, the land of the king, its significance lies in the implications it carries. It refers, quite clearly, to an arrangement by which agricultural land although occupied and husbanded by individuals carried with it the obligation to pay a share of its produce to the ruler. This share was apparently a token of the individual cultivator's debt to the king for the stability and, also perhaps, certain concrete benefits such as common irrigation works, enjoyed by him and the farm.

¹ Please see page 54 (d) of A General History of the Pudukkottai State by S. Radhakrishna Aiyar (1916).

² Page 56 of A General History of the Pudukkottai State by S. Radhakrishna Aiyar. (1916)

Writing on the Southern kingdoms in C. 500 to 900 A.D. Romila Thapar observes¹ : "Land-ownership rested with the king, who could make revenue grants to his officers and land grants to brahmans, or else continue to have the land cultivated by small-scale cultivators and landlords. The latter was the predominant practice. Crown lands were rented out to tenants-at-will. Private land owners bought land and this gave them the rights of sale and gifting. Grants to officers were largely in lieu of salaries and did not stipulate provision of troops or revenue for the State as was the case in a regular feudal structure.

The status of the village varied according to the tenures prevailing and could be one of three ; the most frequent was the village with an inter-caste population paying taxes to the king in the form of land revenue ; less frequent were the *brahmadeya* villages where the entire village or the lands of the village were donated to a single brahman or a group of brahmans. These villages tended to be more prosperous than the others because the brahmans did not pay any tax. Associated with the *brahmadeya* grant was the *agrahara* grant, an entire village settlement of brahmans, the land being given as a grant. These were also exempt from tax, but the brahmans could if they so wished provide free education for the local people. Finally, there were the *devadana* (donated to the God) villages, which functioned more or less in the same manner as the first category of villages except that the revenue from these villages was donated to a temple and was consequently received by the temple authorities and not by the State. The temple authorities assisted the village by providing employment for the villagers in the service of the temple wherever possible. This last category of villages gained greater significance when in latter centuries the temples became the centres of rural life. During the Pallava period the first two types of villages were predominant."

The village communities developed institutions such as *sabhas* or village assemblies which were concerned with matters pertaining to village life such as endowments, irrigation, cultivated land, crime and the maintenance of records. "The link between the village

¹ *History of India* (1966) by Romila Thapar.

assembly and the official administration", writes Romila Thapar, "was the headman of the village, who acted both as the leader of the village and the mediator with the Government".

The following observations¹ based on inscriptions found in the Pudukkottai tract and published as the Pudukkottai State Inscriptions, are pertinent :

"It (village assembly) often fixed the rates of taxes for the different holdings on the basis of the average output on crop, and the facilities for irrigation that the lands enjoyed. (P.S.I.—116)".

"When the assembly declared certain holdings tax-free, it distributed the amount so remitted among the other holdings in the village, so that the total revenue payable to the King's treasury was not diminished....".

"The assembly exercised the right of imposing local cesses".

"P.S.I.—268 and 301 record instances in which the assembly sold in public auction lands on which the taxes were in arrear and applied the amount realised to works of public utility."

"It was one of the duties of the assembly to determine the boundaries of lands, and to prevent disputes".

"The assembly did not neglect works of public utility. P.S.I.—326 mentions the allocation of sites for a street. Several inscriptions refer to the care that assemblies bestowed on the maintenance of tanks², wells channels and other irrigation sources. They also rewarded public benefactors....]"

¹ Please see pages 656-659 of A Manual of the Pudukkottai State (Volume I-I Part I), (1940)

² That the maintenance of tanks, wells, channels and other works of common utility has been the traditional responsibilities of the village community as confirmed by P.S.I. 326 and other inscriptions, was evidently recognised by the British while formulating the Kudimaramat Act of 1858. This Act declares "Wherever by local custom any work for the purpose of irrigation or drainage or connected therewith, is usually executed by the joint labour of a village community, any person bound by such customs to contribute labour to such work who neglects or refuses without reasonable cause to comply with a requisition for such customary aid made to him by the head of the village under the orders of the Tahsildar or other superior Revenue Officer, shall be liable to pay a sum equal to twice the value of the labour which he is bound to contribute."

“To ensure the proper maintenance of order in villages and districts, the assembly granted *Padikkavai* rights to capable men, especially to local chieftains”.

“Though the assemblies were practically autonomous they were subject to general supervision and audit by the King's officers, who frequently attended the meetings”.

Having seen that the responsibility of fixing up boundaries vested with the village assemblies, an examination of the method-employed would be worthwhile. The traditional method in these parts of the country, which persists even now, has been the stipulation of four boundaries and a topographic description. In the words of Sundararaja Iyengar¹: “The Hindu Kings were not unmindful of the advantages derived from a survey and measurement of lands. The Tanjore inscriptions of the time of *Rajaraja-Chola* bear ample testimony to the accuracy and minuteness of the operations, and we find that lands, as small in extent as 1/52,428,800,000 of a *veli* were measured and assessed to revenue. This survey appears to have been conducted in the 17th year of the King, and the officer who took an active part in these survey operations was the great general, *Kuruven Ulagaandan* alias *Rajaraja Maharajen*, whose title *Ulagaandan* i.e., ‘one who measured the earth’ was conferred in recognition of his services in connection with the survey operations”.

Chola inscriptions speak of units of land in terms of *Kul*, *Ma*, and *Veti*². One hundred *Kulis* made a *Ma* and twenty *Mas* made a *Veti*. Although terms like acre and hectare have been officially introduced, the common peasants in Tamil Nadu specially in Thanjavur, Tiruchirappalli and Pudukkottai districts, still measure their land only in terms of *Kul*, *Ma* and *Veti*. Radhakrishna Aiyar points³ out: “The people of Kiranur, after having lived in enmity with one another and committed many deeds of violence, entered into an agreement whereby, if a dam, well or

¹ Page 159 of Land Tenures in the Madras Presidency, (1921)

² Please see page 383 of the Salem District Gazetteer.

³ Please see page 110-11 of A General History of the Pudukkottai State, 1916.

a tank was destroyed, one-fortieth of a *Ma* of land was to be forfeited to the God at Kiranur. He also refers¹ to a statement in Tamil prepared for the year 1826—1827 in which the extents of wet and dry lands in the Pudukkottai State are stated to be 12,500 and 14,200 *Velis* respectively. The uncultivated extent is said to be 3,300 *Velis*. He also says that the lands that were held under a fixed money assessment before the amani settlement were all under low rates ranging from Rs. 18 a *Veli* wet to Rs. 25.

Common ownership.—It may, therefore, be held that the traditional system of full control of land-use by village assemblies, subject only to a formal supervision by the kings, prevailed in the Tamil land of which the present Pudukkottai district was a part. The evidence of periodical distribution of land by the assemblies makes it clear that land, being common property was not saleable by individual cultivator. What he enjoyed was an occupancy right. This implies that while it could be inherited it could not be alienated for any consideration against the wishes of the village community. Village assemblies were responsible for the payment of taxes to the Kings. R. Tirumalai observes² :—“ Collective farming (*Karaiyedu* System) was very much in vogue in medieval times and lands were held in common and such vestiges have been noticed to linger right down to our own times in particular districts like Thanjavur, adjoining Pudukkottai”. In effect the land was not a commodity that could be bought and sold but a source of production. We do not know whether the concept of ‘ownership’, as is understood now-a-days, (especially in respect of land) was considered important in those days. As regards the theoretical position some may maintain that the king was the owner ; others may say the village community owned the land;

1. Please see page 379 of *A General History of the Pudukkottai State*.

2 In a note for the Pudukkottai District Gazetteer R. Thirumalai, I.A.S. who, as Special Officer for Inam Settlements in Pudukkottai, studied the nature of inams in the Pudukkottai area in detail and on whose recommendations the Pudukkottai inams were taken up for settlement in 1956, also says : “I recollect that it was during my settlement of the Thanjavur tract in the fifties some villages had their final parcelling of land and individual settlement of land ownership was done (*Arudikarai*). Examples are—Ganapati Agraharam and Karambium in Pattukkottai Taluk.”

still others may opine that the peasant owned it. Subtleties apart, we may hold that the crucial power of controlling land-use was in the hands of village communities represented by the assemblies. And, further, the tiller was free from undue interruptions in the possession and enjoyment of the portion of land under his plough.

The Decline of the Traditional Tenures.—The great endeavours for the reclamation and methodical settlement of land by the Pallava Pandya, Chola and other early rulers, were not fated to last. The decline of the traditional systems in land tenure in the Pudukkottai area, as elsewhere in the Tamil country, can be said to have begun in the sixteenth century when Nayak rulers came to power in Madurai replacing the ancient Tamil rulers of the Pandya dynasty. In Tanjore, Maratha power gained strength. After the rise of Muslim power in the eighteenth century, a period of political disintegration followed.

If the Nizam of Hyderabad drawing his strength from the Grand Moghul, the Nawab of Arcot from the Nizam and several Poligars from the Nawab, were caught in numerous conflicts and entanglements, and in the event the recently arrived British emerged victorious, subduing all these local powers, it has to be borne in mind that irrespective of who was on the winning side or the losing side, the rough end of the stick fell on the peasantry.

To safeguard themselves from aggressors, villagers sold *Padikkaval* rights to influential chieftains in the neighbourhood. This right means literally, the 'right of watchmanship.' In the words of Radhakrishna Aiyar¹ "Whether a man was satisfied with simply discharging the duties and exercising the powers mentioned in the *padikkaval* deed or whether he gradually made himself all powerful, depended upon the nature of the person to whom the deed was granted." He also gives² the transcript of a *padikkaval* deed, part of which is as follows : ".....On account of the disturbances of the Mussalmans, as our village has become ruined and we have

¹ *A General History of the Pudukkottai State* (1916), pp. 78-79,

² *Ibid*, p. 79.

ourselves become reduced to very straitened circumstances, and as we find no other course open to us and are without seedgrain—we, agreeing to sell the village watchmanship, have fixed the price of the same at 300 kulisaippanam of *Valal Vali Tirantan* and receiving this amount, we, the inhabitants of the village, have sold the village watchmanship to Vijayalaya Tevan on oath.....” This is how ownership of land passed into the hands of chieftains who became zamindars or *amara* under tenure holders and were reduced by the British to the position of mere rent-collectors.

The self-important *palayakars* or holders of the *padikkaval* soon thereafter presumed sovereignty and exercised many powers associated with sovereignty that had not been exercised in past centuries by real sovereigns. The Fifth Report of the Select Committee appointed to report in the affairs of the East India Company (1813) says : “.....The police duties exercised by the poligars were not confined to their own villages, but extended to the protection of the property of the inhabitants and travellers, in the adjoining villages and roads. This extension of authority had gradually risen in encroachment and was converted into a pretext for the most severe oppressions on the people, in the form of fees and ready money collections. Of the perquisites there appear to have been two kinds, which passed under the general designation of *Cavelly*, with a certain allowance on the land revenues and customs, from villages not included within their own Pollams, of from 5 to 10 per cent and received chiefly by the greater poligars. The proportion which fell on the land was generally collected in one payment at the harvest season. If on sending peons to the villages to realize these dues, excuses were made by the inhabitants, some of the poligar’s followers were detached to commit depredations on the villages ; and if this did not end in the acquittance of his demand, the practice was frequently resorted to of carrying off the potail and curnam, beating them and putting them into confinement, until they paid him from their own pocket what he demanded, and such a fine as he chose to impose. The other official requisites which he drew from the customs were either rented by him to those who leased the land of Government or by stationing his own people at the *chokies* or toll-houses to receive them. Though he did not regularly enjoy any *enayam*, he had succeeded by violence

and other methods, in obtaining a considerable portion of land which was entered in the village accounts, as being held under, this tenure or as being waste or uncultivated.

In the lands thus possessed by him, often included gardens and other desirable spots belonging to individuals, which he had obliged them to make over to him. His power and influence enabled him to take the land in the adjustment of differences and disputes, particularly in questions of property and boundaries of land ; for though it was the custom to appoint arbitrators to assist in the determination of the question, the dread of displeasing the poligar, deterred them from expressing an opinion contrary to his own."

Nor was this all. After the dissipation of Central authority, the nominal figures that claimed the position of the central authority held auctions and appointed the highest bidders as renters, to exacerbate the precariousness of the peasantry. Radhakrishna Aiyar informs¹ us that Dr. Caldwell referred to the renters as "rivals of the poligars in oppression". The conditions on the eve of British rule are described² by Col. Fullarton's description of Tinnevely ; ".....His (renter's) object too frequently is to ransack and embezzle, that he may go off atleast enriched with the spoils of the province. Renters on the coast have not scrupled to imprison respectable farmers and to inflict on them extreme severities of punishment for refusing to accept sixteen in the hundred as their proportion..... The unfortunate ryot must labour week after week at the repair of water courses, tanks and embankments of rivers. His cattle and sheep and every other portion of his property is at the disposal of the renter and his life might pay the forfeit of refusal. Should he presume to reap his harvest without a mandate from the renter, whose pcons, conocopolies and retainers attend on the occasion, nothing short of bodily torture and the confiscation of the little that is left him could expiate the offence. Would he sell any portion of his scanty portion, he cannot be permitted....."

1. *A General History of the Pudukkottai State* (1916), Page 213.

2. *Ibid.*

A clear distinction is to be drawn between the poligars and renters. Though the unity between the two lay in their oppression of the peasantry, the poligars were local men, who took advantage of the political disintegration. They wanted to get hold of the ruling power. If they already had it, they wanted to make it permanent. If it already seemed permanent, they wanted to expand it. Thus, due to political conditions, which they fancied as opening endless avenues of power to them, they became ambitious and oppressed the peasantry. Because of their self-styled attributes of sovereignty, they at times thought of public welfare. On the other hand, the renters were mostly outsiders. They were businessmen. They had obtained the right to collect a certain revenue from the villages in auction or by other unholy means. They did not even appreciate the fact that agriculture should continue as an economic activity if anything is to be collected from the peasantry. Their only aim was to enrich themselves as quickly as possible.

The Muslim influence introduced, among other things the concept of state ownership of land. The following quotations are given in support of this.

"The Muhammadan rulers are generally supposed to have augmented the land-tax to such a point as to have absorbed all landlord's rents¹....."

"In the interval between the Turkish and Moghul dynasties a number of the Hindu kingdoms of the South were absorbed by Mohammedan Kingdoms, the result of incessant petty wars. This period saw the rise of the farming system, mere outside speculators taking the place in many cases of the old native rajahs. Where the Mohammedan found it inconvenient to deal with village communities and native rajahs were not at hand, they appointed farmers of land revenue²....."

....."The Muhammadan occupation of the Carnatic had degraded the mirasdars³ almost into the position of permanent

¹ *A Manual of the Administration of the Madras Presidency* ; Page 114.

² *Ibid*, page 115.

³ The term means, according to Wilson's *A Glossary of Judicial and Revenue Terms* (1855), "The holder of hereditary lands, or officer in a village. In the Northern Sarkars, especially, a hereditary village officer or servant : In Sylhet, the holder of an estate, usually of very small extent, recognised in perpetuity ; a petty landholder or cultivator".

tenants ;.....the Musalman Government by absorbing the whole landlord's rent became not only sovereigns but the landlords of the country enforcing in practice their favourable maxim, that the State is the exclusive proprietor of the soil¹.....”

During these hectic times, Pudukkottai yet had abundant forests, dominated by the fierce Kallars. If the Vellalars were agriculturists these Kallars engaged themselves in hunting and the pursuit of lawless exploits². They helped the Vellalars against one another. This inborn habit of taking sides and undertaking military endeavours for others, enhanced the demand for them in the adjoining areas in the years of political disintegration. The agriculturists of this area had somehow adjusted themselves with this tribe and arrived at a compromise, making co-existence possible. But when the old village communities as basic units of power were weakened, their place as in the rest of the country was taken by non agricultural aristocrats. Thus power in Pudukkottai understandably passed into the hands of the Kallars of this area. Their chiefs, at first the Pallavarayas and then the Tondaimans, in consonance with the general order that prevailed throughout the country, assumed ruling power.

The report of Major Blackburne, the first British Officer in Pudukkottai, submitted to the Madras Government³ on 31st December, 1808 says : “ The principal production is dry grain, the proportion of which to paddy is as four to one. The whole of the dry grain is consumed in the country. Nearly the whole of the paddy is exported to the surrounding districts and to Ceylon. To cultivation of both the paddy and dry grain is capable of being much extended.

An equitable and liberal system of revenue and the consciousness of protection to their persons and property will, it is hoped, encourage the cultivators to double the produce of the country in a couple of years more..... The division of the produce was very irregular.... all idea of a fixed rate appeared to be lost. The share of the cultivators

¹ *Our Indian Protectorate* by Charles Lew Tupper ; Page 169.

² The Kallars, however, were to become in time good agriculturists themselves and served as sub-tenants and tenants in chief under the Vellalars.

³ *A General History of the Pudukkottai State*, (1916), Page 352.

varied from 40 to 50 per cent on the crops of dry grain and from 25 to 40 percent on paddy. The late Tondaiman, a year before his death obtained from me a statement of the division of the crops in the surrounding districts and after an attentive consideration of all the circumstances connected with the subject, he fixed the Circar or Government share of paddy at 50 per cent and of dry grain at 33½ per cent and directed that the calculation should be made conformably to the practice in the company's districts after the deduction of Sotunterrum amounting to ten per cent. This division continues and particular attention is paid to secure to the cultivators the full benefit of it.

I attribute the general poverty of the country which is very great and striking chiefly to the *Amani* system.

With the exception of informers, no checks existed in the Revenue Department. No double set of accounts as in Tanjore and the Carnatic ; no Curnams ; no regular Cutcheries in the District with officers appointed by the Government ; no regular dufter in the capital ; no office anywhere in which the accounts of the country are recorded. Tondaiman himself or a person temporarily or verbally authorised by him usually received the money which was transmitted from the districts by the Revenue Officers ; sometimes this person gave a receipt ; sometimes the Sirkeel, and not unfrequently no receipt was given. The Revenue Divisions of the country seldom continued the same two years together. As caprice or interest dictated, portions of land separated from one division were added to another....."

The power of allocation had completely passed on to the hands of the Chiefs, who claimed sovereign attributes to themselves. Village communities, their representative assemblies, their power to distribute land among the cultivators had become a matter of the past. This only reminds one of the following observation of Charles Lewis Tupper¹: "In considering those ideas of Sovereignty, which are based upon the land, we may look downwards from the chief to the cultivator, or upwards from the cultivator to the Chief ; the nexus is the same from whichever point of view we

¹ Paragraph 8 of the Report of N. Rajagopalan, Special Assistant Settlement Officer, Pudukkottai, dated 31st January 1968.

regard it ; and, whether we analyse the status of the prince or of the peasant, we find that a great part of the matter under analysis is the tenure of land".

The prerogative of granting inams—an attribute of sovereignty in early times was now exercised by small kings. Thus one finds grants not only by the Rajas of Ramanathapuram, Thanjavur, and Pudukkottai but by the Chiefs of Kolattur, Marungapuri etc. The grants of this area to the religious classes is matched by large scale inam grants to the warriors, petty chiefs, etc., and such inams are called *Amaram*, *Rokka kuthagai*, *Umbalam* or as *Oozhium*. Probably such grants stopped only in 1820, the year of Blackburne's notification abrogating the powers of rulers and their subordinates to create or grant fresh inams¹....." This would have been evidently, unavoidable, when the land, the most important source of production, had to be allocated on such principles as were fit to meet the political and military needs of the times. But appropriation of land for themselves, was also present, which shows that everything was not carried on in a strait-laced manner. In their review of the Administration Report of Pudukkottai, for the year 1874-75, the Government of Madras observed that the alienations had been extensive and that the member of the Raja's family had 1,10,000 acres. But the actual extent was more than this, as in the absence of regular survey of land, this extent had been under estimated. To this we will return later on.

The lands of Pudukkottai State could be divided into two categories, namely, 'Alienated' and 'Non-alienated'.

Alienated land :

(a) *Jagirs*² : There was six of these, namely the Western Palace Jagir; the Chinnaramanai Jagir; the Manovrithi Jagir; Rangam Pallava Raw's Jagir; Ranganatha Panrikondar's Jagir ; and the

¹ Para of the report of N. Rajagopalan, Special Assistant settlement Officer, Pudukkottai, dated 31st January 1968.

² The institutions of zamindari, diwani and jagirdari developed under the Moghuls. Zamindari was the rights of a tributary feudal-lord obtainable from the emperor on the promise to pay a stipulated revenue. This right included the power of ruling over the inhabitants of the estate. After the disappearance of a strong centre, this right was granted even by provincial governors, who had often asserted their independence from Delhi. Originally, the cultivator in a zamindari's estate had a concurrent and heritable right over his land, the zamindari being a form of superior land-ownership. Evictions of the cultivator from his land were rare. The zamindars collected and transmitted the local revenues to the ruler.

Introduced by Akbar, diwani was an office at the apex of the department of land revenue. It was a feudal instrument to keep the zamindars in tow and to enable the central despot to maintain the integrity of the revenue system.

Jagirdari was a system of grants given to high State officials. Jagirdaris or estates were usually given in perpetuity. The system of assessment of revenue and collection of tax was left to the Jagirdars. These grants were in the form of payment to the favoured officials for services directly rendered to the imperial Government. No annual or periodical payment was stipulated in these grants.

Ammani Raja Estate. When fresh Jagirs were applied for in 1868, according to precedent for the daughters of the next ruler, the Government sanctioned an allowance of Rs. 10,000 a year for each princess.¹ Unlike the general nature of Jagirs, these Jagirs had been granted to the scions of the royal families for maintenance and a mark of respect. They were mere revenue assignments, inalienable by sale, gift or mortgage, resumable for misconduct or other reasons, liable, at ordinary times, to cesses like *Pillu vari* and to 'extraordinary assessment' when necessity arose. But with a diffident peasantry, how far these rights would have been carried, does not need elaboration. Evidently, the Jagirdars possessed more extent of land than was believed. With the amalgamation of Chinnaranmanai Jagir in 1903, it is seen that the gross extent of land in the State, shown in the administration report increased by 83,000 acres. Though, after the completion of settlement, the increase shown was reduced by nearly 16,000 acres, it appears that more than 65,000 acres of land were under this Jagir alone, in excess of what it was believed to be.

The Western Palace and Chinnaranmanai Jagirs were created by Vijaya Raghunatha Raya Tondaiman (1730-1769) as a political step-to-make friends with two of his brothers Raja Gopala Tondaiman and Tirumalai Tondaiman who might otherwise have opposed the rule of the raja. The creation of these Jagirs is described as one of the first acts of the ruler. The year of creation of these Jagirs may, therefore, be taken as 1730. Each of them was estimated to yield a revenue of 20,000 Pon or Rs. 25,000 a year.

The Monovrithi Jagir, the origin of which one is not correctly known, must be the oldest. But in his letter, dated 3rd May 1917, the Acting Chief Secretary to the Government of Madras wrote to the Under Secretary of State for India, London:² "Between the years 1789 and 1805, Vijaya Raghunatha Tondaiman, the then

¹ Pages 408-409 of *A General History of the Pudukkottai State*,

² National Archives, Delhi.

Raja of Pudukkottai, set apart four villages for the use of his wives. He left two sons, who died, the elder in 1825 and the younger in 1839. After their death, their wives obtained possession of these villages and enjoyed their revenues. A number of villages were added to the original estate by the ruling rajas from time to time; but the number was eventually reduced to 17. This estate was known as Manovrithi Jagir”.

It was set apart for the maintenance of the wives and unmarried children of the Raja. The revenue of this Jagir was controlled by the Raja at his pleasure.

Rangam Pallava Row's Jagir and Ranganatha Panrikondar's Jagir had been granted to the sons-in-law of the Raja Raghu natha Tondaiman (1825-1839). The Ammani Raja Estate was granted to the first daughter of Raja Raghunatha Tondaiman (1825-1839). The extent of land covered by these Jagirs as they stood in 1839 was as follows:—

	<i>Number of villages.</i>	<i>Extent in. (Velis).</i>
(i) Western Palace Jagir ..	10	1,982
(ii) Chinnaranmanai Jagir ..	19	1,627
(iii) Manovirthi Jagir	16*	771
(iv) Rangam Pallavarow's Jagir.	11	849
(v) Ranganatha Panrikondar .. Jagir.	4	717
(vi) Ammani Raja Estate ..	4	318
	<hr/> 64	<hr/> 6,264

The fact that out of the total extent of 36,997 *Velis* of land alienated, 6,264 acres of land were in the hands of members of royal family goes to show how freely the powers of management of land were used for the family.

But there is always another way of looking at anything. Regarding the exercise of the powers of management of land by Tondaimans, or at least regarding the concept of such an exercise,

N. Rajagopalan, formerly Special Assistant Settlement Officer, Pudukkottai writes : "Cogent material has become available after the advent of the Thondamans. Several of them were enthusiastic and liberal minded rulers. While to a superficial observer it would look as if the rulers were doing 'harakiri' in granting vast traces of lands as inam, a careful study would reveal that under the cloak of religious or material grants, there lay hidden a far-reaching and progressive policy of land colonisation, reclamation of arid lands, construction of irrigation tanks, construction of colonies, etc. One could further state that it was not only a programme for conferring economic benefits but it was an act to bring civilization to the backward tracts that comprised Pudukkottai. With those views, enlightened kings brought from different areas men of different walks of life so that scrub jungles could be cleared, tanks could be formed, lands brought under cultivation, the uninhabited areas might get developed and civilized activities get a fillip. Another factor that strikes one's notice is the liberal approach of the kings towards their citizens and their easy accessibility. This has led to the changes in the tenure of lands frequently. The revenues of the State probably underwent frequent changes owing to this liberal solicitude of the kings to the agricultural classes. Though this noble attitude did not find reflection in the attitude and behaviour of the village-level officers of the Government, who were perhaps inclined to get the maximum benefit to themselves in the discharge of their official duties, still it has to be stated that several of the rulers were benevolent."

R Amarams.—In the order of importance, next come amarams, which were the grants for military services. The country had a feudal military system, with several Sardars or Colonels. Under them they had in the order of rank Vaguppu Servaikars (Captains or squadrons), Servaikars (Captains) and Amarakars (Retainers).

* This is based on Mr. Bayley's report to the Government of Madras, sent on 7th July 1841 and reproduced on page 407 of *A General History of Pudukkottai State*, 1906.

¹ The term means, according to Wilson's *A Glossary of Judicial and Revenue Terms* (1855), "lit. command of thousand foot) a grant of revenue by the Prince or a Poligar, on condition of service generally, military or police; such grants were resumable when the *Amanamdar* or grantee failed to perform the stipulated service.

Each officer was allotted land calculated according to his importance. In the beginning of the nineteenth century 2914-7/32 *Al-jivitams* (each *Al jivitam* was either $3\frac{1}{2}$ acres of irrigated wet land, or 5 acres of rainfed wet land or 10 acres of dry land) had been granted under this category.¹

(c) *Oolium. inams* : From lighting lamps to washing clothes, all kinds of sundry domestic duties were remunerated by grant of lands under this category. These were either *Unpalams* or *Rokka Kuthagais*. These included services in the palace also.

(d) *Religious inams* :—Devasthanams, including mosques and monastic establishments, chattrams and feeding and alms houses had been granted lands for their maintenance. *Brahmadayams*, grants to brahmins which were either *sarvamanyam* (rent free) or *ardhamanyam* (half free) or *srotriems* (given for scholarship in vedas), *vedavrithi* and *puranavrithi* (for the recitation of the Vedas and the Puranas) come under this class of inams. Of all these *sarvamanyams* were considered irresumable. The temples and chatram lands were held and managed by the State in trust.

Non-alienated land.—

(a) *Amami* or *Varapattu*.—This system involved sharing to the actual produce with the State. This system affected the inclination of the peasant to cultivate, because the greater the produce, the heavier was the assessment. Moreover, the cultivator was a tenant-at-will. In ascertaining the quantity of produce corruption of the officials played a destructive role.

(b) *Teervai* or *Teervai*.—These lands were held under *teervai* rates, but the rates were not based on any definite principle. What Major Blackburne wrote in 1807, was confirmed by Pennington in 1875. The latter described² the rates of assessment in the State thus: “218 *nunjah* rates varying from Rs. 1-14-0 a *veli* to Rs. 132, 16 *nunjah* garden rates ranging from Rs. 31-4-0. to Rs. 475, 202 *nunjah* rates from fifteen annas to Rs. 62-8-0 and 17 *nunjah* garden rates from Rs. 10-2-2 to Rs. 1,125 a *Veli*”.

¹ Page 347 of *A Manual of the Pudukkottai State, 1921.*

² Page 352 of *A Manual of the Pudukkottai State 1921*

The distribution of land under these categories, in 1838-39 was according to Bayley's report¹, dated 7th July 1841 as follows:—

Category.	Extent held in Velis.	Per cent to the total extent.
(1)	(2)	(3)
i. Devadayam inams (exclusive of Chatrams).	9,594	17-5
ii. Chatrams	1,641	3-0
iii. Grants to Brahmins	7,763	14-1
iv. Jagirs	6,264	11-4
v. Amarams and Ooliums	8,935	16-2
vi. Minor and life oombalams	2,800	5-1
vii. Non-alienated lands (both Amani and Teervaipattus).	17,958	32-7
	54,955	100-0

As may be seen from this, 67·3 per cent of the total extent of land was in the hands of non-agricultural people. The meagre 32·7 per cent of the land which stood in the name of the peasantry, was subjected to unscientific modes of assessment and interference from government. Thus stood the peasantry of Pudukkottai in the beginning of the twentieth century.

Settlements Old and New.—With the peasantry driven to the verge of collapse, all that the East India Company's revenue inspectors could collect were *nulla bona*. The authorities of the Company were thus compelled in their own interest to ponder on the possibilities of stabilising their revenues. One means of doing away with the uncertainties involved in collecting money from the peasantry was associating the richer rural groups with the system and settling the dues with them.

¹ Page 387 of *A Manual of the Pudukkottai State*, 1921.

The first of such settlement was the work of the Viceroy Lord Cornwallis, author of the Permanent Settlement. This was a well thought out piece of sophistry, the full significance of which was not fully understood by many people. Three reasons led to this settlement:

(i) An administrative reason was that the ancient Zamindars, who had once sincerely collected local revenues and transmitted them to the Government, were in disarray. They could not collect anything from the peasantry because the peasantry had nothing to give. But the revenues to the Government could not be for-gone for this reason. So a class of people having money in hand, and who could take up the unpleasant task of extortion was needed. Once a permanent settlement was reached with this class, collection became its responsibility.

(ii) A political reason was explained by Lord Cornwallis himself : "...A landholder who is secured in the quiet enjoyment of a profitable estate could have no motive for wishing for a change. On the contrary if the rents of his lands are raised in proportion to their improvement, if he is liable to the dispossessed, should he refuse to pay the increase required of him, or if he is threatened with imprisonment or confiscation of his property on account of balances due to Government upon an assessment which his lands are unequal to pay, he will readily listen to any offers, which are likely to bring about a change that cannot place him in a worse situation, but which holds out to him hopes of a better."

So a class of landlords came to be created at the expense of the peasantry. Cornwallis hoped the new zamindars, placed in a position above the peasantry and below the Government, would be inclined to take sides with the persons above them and not with the poor peasantry.

(iii) The preamble to the Regulation II of 1793 read: "... the property in the soil has been declared to be vested in the land-holders, and the revenue payable to Government from each estate

has been fixed for ever. These measures have at once rendered it the interest of the proprietors to improve their estates, and given them the means of raising the funds necessary for that purpose.

When extension of cultivation was production only of a heavier assessment, and even the possession of the property was uncertain, the hereditary landholder had little inducement to improve his estates: and moneyed men had no encouragement to embark their capital in the purchase or improvement of land, whilst not only the profit but the security for the capital itself, was so precarious. The same causes therefore which prevented the improvement of land depreciated its value...."

This was an open invitation to the meagre number of people in India who had capital reserves to come and purchase property in the soil which the company promised to declare¹ to be vested in the landholders'. The Company was able thus to begin diversion of the capital resources of the country which would otherwise have participated in commerce and industry detrimental to the commercial interests of the British, into agriculture. For this, all that it had to do was to recognise a landed right in perpetuity, which was not a difficult thing to do.

In the words of Bhowani Sen¹: "The framers of the Regulation expected that this would enable them to get substantial revenues unhampered by famine, etc. The peasant was totally ignored and the hereditary occupancy right he had always enjoyed was annulled. The controversy at that time in the midst of the ruling circles centred around two views: one view maintained that land belonged to the state and the Zamindars were mere collectors; the other view maintained that the Zamindars were the proprietors. While Grant advocated the former view, Sri John Shore advocated the latter. But the historical fact of the existence of the hereditary occupancy right of the peasant and the common ownership of the village communities were ignored. By a stroke of the pen, the process of reckless expropriation of the peasantry, adumbrated since 1765, with the assumption of *Dewani* by the British East India Company,

¹ Page 65 of *Evaluation of Agrarian Relations in India*.

was regularised and given the stamp of statutory authority ; because it was taken for granted that the Zamindars would invest capital in agriculture ”.

The results of this were :

(i) Indian capital, formed over several centuries was effectively barred from entry into commercial and industrial enterprises and the monopoly of the British in these branches of the economy continued.

(ii) Indian capital found its way into the British treasury to purchase rights on Indian soil.

(iii) Investment on land did not ensue either because the land is a limited factor.

(iv) It created an unhealthy competition among people for gaining more and more of this right.

(v) Money became a measuring rod of men in the country and the peasantry which stood no chance of keeping pace with other groups, was hurled into an economic limbo.

(vi) The process of displacing the tiller from his land took a legal form.

Another important settlement, was the Ryotwari Settlement. In a Seminar on the Agrarian History of Tamil Nadu (1750-1947), Dr. Sarada Raju referred to the theoretical basis needed by the British for the introduction of the ryotwari system. She said¹. “ How far was theory used to buttress policies and administrative action determined by expediency ? According to Eric Stokes, the Ryotwari system of revenue introduced in Madras in the 1820's was an outstanding example of the application or mis-application of theory in support of policy. While the objective of introducing the ryotwari system was the maximisation of revenue, its ration was the assumption that in India, unlike in England, all land belonged to the ruler, and the cultivator had no permanent right to the land ”.

The idea advertised in favour of this settlement was “ peasant proprietorship ”. This was an offshoot of the permanent settlement. Judging from its effect on the peasantry, we may say that it was a sophisticated form of the Permanent Settlement.

¹ Pages 4-5 of the paper read by Dr. Sarada Raju in the Seminar on 23th October, 1974.

Under the Permanent Settlement big estates had been given to the rich in total disregard of the peasantry. Such persons were not available at all places. The condition of the peasantry in the zamindaries' besides, began to attract attention. Moreover, a feeling that under a permanent settlement which had fixed the revenue for ever the Government would stand to lose, was also gaining strength among the British. The Permanent Settlement thus stopped with Bengal, Bihar, Orissa, Banaras, and North Madras. In other areas, Ryotwari Settlement was favoured.

Under this system the land was surveyed and assessed on the basis of the *taram* and irrigational facilities it enjoyed. The land revenue on it was settled directly with the peasant. He was deemed to be the proprietor of the land occupied by him, subject only to the payment of the revenue to the Government. The amount so settled was subject to periodical revision, the period differing from place to place. In the Madras Province it was 30 years. The peasant could sublet, mortgage, sell or transfer the land by any other means. (His counterpart under the zamindari tenure did not enjoy these rights as they were given to the tenure-holders. Subsequent reforms, however, gave such rights to a section called "occupancy ryots").

But the basic effect of the Permanent Settlement, namely that the land was converted into a commodity exposing it to the influence of money, resulted from the Ryotwari Settlement also. If the very rich went for estates, others aimed at these ryotwari lands. The idea that the land was meant for agriculturists did not find favour. It was replaced by a view that the land was meant for those who could pay a price for it in terms of money. For the peasant, the idea that his land was meant for his agriculture was gone. It was replaced by a view that his land was a property which could be converted into money at any time. As agriculture has not always been profitable both due to natural depressions and due to his own extravagance, the peasant frequently resorted to this right of alienation. In course of time, land began to slip away from the hands of the peasants and non-agricultural people into those of money-lenders. Thus ryotwari system, resulted in (i) absentee landlordism and concentration of land in a few hands ; and (ii) the emergence of a poor peasantry with no rights over land.

maintained, "a small territory like Pudukkottai could ill-afford to make". He held that by abolishing the Amani system, peasants were no longer tenants-at-will as they were before and that they would now find themselves rich.

But how did the abolition of the Amani system augur for the peasantry in the State? A careful study would show that the faults which Sastri noticed in the Amani system were of the Government's making. If the peasants had suffered as tenants-at-will under Amani, it was because the Government had been indiscreet in evicting them. In opposing Amani Sastri was merely reiterating the views of the British who had earlier upheld the abolition of Amani system in British territory. If storage and transport were problems to the State, it can be imagined how much more difficult they should have been to the small cultivator. Had Sastri (i) eradicated corruption and malpractices in the system of assessment and collection, (ii) reduced the State's share of produce, and (iii) legally dispensed with indiscreet eviction, he might have conferred a greater security to them than obtained by conferring the right of alienation. However, it needs to be remembered that Sashiah Sastri working as he was under several constraints, would not have found these tasks easy. Had the State's share of revenue been reduced, the British Government may have cavilled at it, as it would have been intent on securing the maximum possible revenue from the land, which was the mainstay of their revenue. As a matter of fact, even for what Sashiah Sastri managed to achieve, he was subjected to criticism by those affected.

The second important measure was the resumption of the Western Palace jagir in 1881. In violation of the stipulated conditions, the jagir had been subjected to several alienations which prompted this measure.

In 1834-85, Sashiah Sastri drew up a set of rules for the enfranchisement of inams on the model of the Madras Inam settlement. The rules were brought to force from September, 1888. The inams granted for the upkeep of religious and charitable institutions or for the performance of village or temple services were registered on their existing tenures in cases where the performance

of the service or the charities was considered satisfactory and necessary. In other cases, the tenure was altered and the lands were brought under full assessment.

It has already been mentioned that the assessment in Pudukkottai was not based on a scientific study of the land. In G.O. No. 324, Political, dated 23rd April 1887, the Government of Madras expressed their hope that the inequalities in the incidence of assessment would soon be corrected by a new settlement. Accordingly survey work was first taken up in October, 1893 with a few local men previously trained in the Madras Survey party. But the work gained momentum only after the appointment of Mr. Macmahon as Superintendent on 1st July 1895. The work was completed in 1907. Work on ryotwari settlement was taken up thereafter. P. Venkataramanujam Chetty, Revenue Settlement officer, finalised a scheme report on the 19th December 1909, which obtained the approval of the Pudukkottai Darbar in 1910. The main Features of this settlement were :

- (i) "Achukkattu" a classification of land in between the "wet" and "dry" was abolished.
- (ii) An extent of 2,305 acres of land held under "ekasal" (temporary occupancy for one year) was merged with Government waste lands and covered by the settlement.
- (iii) There was to be no seasonal remission.
- (iv) There was to be no charge for a second crop.
- (v) No baling remission was granted but the classification of the baling land was lowered.¹
- (vi) Relinquishment of land was not permitted.

Next to be mentioned is the resumption of the Manovriti Jagir in 1911-12. This was included in the settlement arrangements. A sum of Rs. 18,000 per annum was set apart for the maintenance of the erstwhile rani-beneficiaries.

After all these important changes, the Pudukkottai State acquired a system of land tenure which was more or less the same as in the Madras Province. In some points like remission there

¹ In 1911, the Darbar granted a baling remission of Rs. 1 per acre.

were differences but excepting the unenfranchised inams all other lands had come under the ryotwari system. The Darbar had a Land Records Department that carried on the survey maintenance work as in British India. The System of collection of land revenue was governed by the Pudukkottai Regulation II of 1880 which had been drawn up closely on the lines of the Madras Revenue Recovery Act.

The Darbar's attitude towards the peasant can be gauged from the cases of sales of land for the realisation of revenue.

Year.	Land sales.	
	Number.	Amount of revenue realised.
(1)	(2)	(3)
		RS.
1898-99 ..	108	1,890
1899-1900 ..	197	4,074
1900-01 ..	296	6,333
1901-02 ..	211	7,078
1902-03 ..	455	12,735
1903-04 ..	155	4,959
1904-05 ..	25	305
1905-06 ..	1	1,100
1906-07 ..	201	1,100
1907-08 ..	199	3,708

It may be seen that the land sales were mostly taken up for small dues.

The figures available in many cases are not uniform and continuous. An attempt had, however, been made to classify the available statistical information and furnish them. But the general trend is too clear to become obscure due to the lack of abundant statistical information for all the years.

There was reason for the increase in the extent under ryotwar holdings. Inams were often enfranchised, whenever *not* necessary and included in the ryotwari holdings. But, whenever the extent of ryotwari holdings came down, it should have been only because of the expropriation of peasants and the buying in of lands for the arrears of revenue or for other reasons. It may be seen how from the year 1929-30 to 1940-41 the extent under ryotwari came down.

That the peasants, at times, preferred even to leave the land due to their inability to pay the revenues is evident from the remarks of the Darbar in its *Report on Administration* for the year 1910-11 : "The balance still outstanding in these (Kulattur and Alangudi) taluks represents mainly cases of land sales in which orders have been passed out adjustments have not yet been made in the revenue accounts. Most of the land to be sold was worthless and the patta-dars preferred to relinquish the holdings rather than pay any portion of the arrears due thereon, an inevitable consequence of the policy of "No Relinquishment".

Annual kist from the pattas. (1) .	Number of pattas in.			
	1937-38. (2)	1940-41. (3)	1945-46. (4)	1946-47. (5)
Rs. 10 and less ..	99,056	99,319	1,07,314	1,09,734
Over Rs. 10 and below Rs. 30.	16,602	16,527	17,915	19,088
Over Rs. 30 and below Rs. 50.	3,192	3,226	3,299	3,192
Over Rs. 50 and below Rs. 100.	1,724	1,584	1,398	1,381
Over Rs. 100 and below Rs. 250.	518	600	501	532
Over Rs. 250 and below Rs. 500.	97	97	90	88
Over Rs. 500 and below Rs. 1,000.	18	25	16	16
Over Rs. 1,000 . ..	2	..	..	1
Total ..	1,21,209	1,21,378	1,30,533	1,340,32

The miserable position of the agriculturists and landless labourers may become clear from a perusal of the following somewhat unorthodox figures. The increase in the last ten years may also be noted.

<i>Year.</i>	<i>Total number convicts in the Central Jail. Pudukkottai.</i>	<i>Number of agriculturists and landless labourers (out of column 2).</i>	<i>Number of females (out of column 3).</i>
(1)	(2)	(3)	(4)
1900-01 . . .	171	100	Not known
1901-02 . . .	135	64	Do.
1902-03 . . .	108	74	Do.
1903-04 . . .	87	52	Do.
1904-05 . . .	83	59	Do.
1935-36 . . .	460	277	44
1936-37 . . .	448	294	54
1937-38 . . .	358	188	26
1938-39 . . .	426	258	45
1939-40 . . .	470	245	22
1940-41 . . .	697	471	90
1941-42 . . .	486	269	34
1942-43 . . .	634	166	7
1943-44 . . .	716	217	Not known
1944-45 . . .	672	303	Do.
1945-46 . . .	682	395	136
1946-47 . . .	704	547	72

There was an organised judicial system in Pudukkottai. It is possible that such a large number of agriculturists committed what were considered crimes every year. But the question is, why did they have to. The continuously increasing number of agriculturists going to jail every year, and the female participation therein, shows how deeply the peasantry was plunging into poverty.

The Economic Programme Committee of the Indian National Congress in 1947 made certain specific recommendations. To prevent large scale alienations by the Zamindars, in view of the

Impending abolition of the Zamindari system, the Madras Estates Communal Forests and Private Lands (Prohibition of Alienation) Act was passed in 1947. In order to provide some immediate relief to the peasants in the Zamindari areas, pending finalisation of the measures of abolition, the Madras Estates Land (Reduction of Rent) Act, 1947 was passed.

Based on the recommendations of the Economic Programme Committee of the Congress to eliminate all the intermediaries between the tiller and the State, the abolition of the Zamindari System was taken up in all the States. In Madras, the Estates (Abolition and Conversion into Ryotwari) Act (Tamil Nadu Act XXVI of 1948) was passed. It included all the estates which were permanently settled. As regards the inam estates it included only those which became estates prior to the introduction of the Estates Land (Third Amendment) Act, 1936. Then the abolition of the minor inams was taken up. The Tamil Nadu Inams Estate (Abolition and Conversion into Ryotwari) Act was passed in 1963. In the same year, the Tamil Nadu Minor Inams (Abolition and Conversion into Ryotwari) Act was also passed. The settlements under these three enactments come under the category of new settlements.

So far as Pudukkottai was concerned there was no proprietary estate, as the entire revenue administration was in the hands of the raja and his darbar. But as already noticed, several estates and smaller bits of land had been granted as inams by the raja. Their settlement had been taken up by Sir A. Sashiah Sastri.

The inams of Pudukkottai as they stood regulated by the Pudukkottai Inam Rules, 1888, were different in some respects from the inams in the British territory. The Pudukkottai Darbar was all along holding the view that the inam grants made in this area included the rights for *melvaram*¹ and *kudivaram*²; and that the cultivator

1. *Melvaram* : This seems to have come from the Telugu word "*Meluvaram*" which is defined by Wilson as "the proportion of the crop claimed by the Government".

2. *Kudivaram* : Means, according to Wilson's Glossary, "the share of the produce which is the right of the inhabitants or of the cultivators".

under the *inamdar* could not claim *kudikkani*¹ right. Thus the right of occupancy extended by the British Government to the cultivators in estates were not available to the cultivators of *inam* lands in Pudukkottai. Another special feature of the Pudukkottai *inam* was that the State held that all grants, excepting those made to religious and charitable institutions for their maintenance and those made to brahmins for subsistence were revocable. Though the heirs of the *inamdars* were generally allowed to enjoy their fathers's *inam* lands, the State asserted that the personal *inams* reverted to it on the death of the *inamdar*. The holdings were, accordingly, placed under attachment on the death of the *inamdars*. The heirs would apply for getting the *lavanam*² transferred to their names. In some cases, where the heirs were found unsuitable to hold *inams*, their requests for the transfer of *lavanam* were rejected. Thus the specialities of Pudukkottai *inams* were that the *iruvaram*³ right was given to the *inamdar* at the cost of the peasant and the right of automatically getting the *inam* lands reverted to the State on the death of the *inamdar* was asserted by the State at the cost of the *inamdars*. So, from the peasant's point of view, his condition when compared with that of his counterparts in the British territory was worse. They had to be brought first on par with the *inams* of the rest of Tamil Nadu.

With this aim, was passed the Pudukkottai Settlement of *Inams* Act in 1955 (Tamil Nadu Act XXIII of 1955). R. Tirumalai, I.A.S., was appointed Special Officer for *Inam* Settlements at Pudukkottai to study the nature of *inams* in the Pudukkottai area and recommend means of settling them.

¹ *Kudikkani* : The term "kudi" means a house, a village, a town, a tribe, an inhabitant or even a tenant, according to Wilson. He defines the term "kani" as a property, possession, right of possession or hereditary right. The combined word, *kudikkani* means the tenant's right.

² *Lavanam* : This term should have been derived from the Telugu word, *Lavanamu* which means, according to Wilson, "A list of public servants, or of soldiers, the profits of a custom house : (it is said to be Hindi, perhaps from an obsolete of *Lana* to bring)".

³ *Iruvaram* : This seems to have been a Tamil equivalent of *iruvara*, a Kannada term, which according to Wilson means "Both the Government's and cultivator's shares of the crop".

Based on his report the Pudukkottai inams were taken up for settlement on 15th March 1956.

The Special Officer classified 83 villages as whole inam estates since these were either separate villages at the time of the grant or were treated as separate villages by the Darbar prior to the survey of the Pudukkottai State in 1904. It was observed¹ that these estates correspond to the post 1936 inams in the other area of Tamil Nadu. One of these villages, namely Alathivayal was transferred to Arantangi taluk. The remaining 82 whole inam estates, covering an extent of 56.21 square miles were notified under the Inam Estates Abolition Act, 1963. Excepting 15 villages (13.06 square miles) which are covered by stay orders of courts, all other 67 estates (43.15 square miles) have been abolished and converted into ryotwari.

Now, coming to the abolition of minor inams, based on the Report of the Special Officer, the implementation of the Minor Inams Abolition Act, 1963 was taken up in the extent of 128.74 square miles (in 370 villages), but many representations were received from the ryots that most of the minor inams taken up for abolition under Act 30 of 1963, were really inam estates as defined by Act 26 of 1963. N. Rajagopalan, who was appointed Special Officer to enquire into this, reported, that the holdings in an extent of 46.60 square miles in 116 villages were part village inam estates and that those in the remaining extent in those villages, i.e. 37.96 square miles (in 107 villages) were minor inams. Accordingly, the Act 26 of 1963, was amended by the Act 23 of 1969, of as to include the part village inam estates in 116 villages, referred to above.

Out of these 116 part village inam estates, 108 covering an extent of 39.44 square miles, have been settled. The remaining 8 part village inam estates (7.06 square miles) are covered by the stay orders of the courts, and introduction of Ryotwari settlement in them, is therefore, withheld.

Since more than 30 years had passed from the time of ryotwari settlement introduced by the Darbar in the non-alienated lands and to bring about uniformity, Government ordered a resettlement of

¹ G.O. No. 2695, Revenue, dated 22nd July 1958.

these lands in 1961. The total extent covered by this resettlement was 1,105.76 square miles (420 villages, including four villages, now in Manapparai taluk). This work was completed in 419 villages, before the end of 1964-65. The only village, namely Edayanvoyal of Tirumayam taluk (0.01 square mile), which had been omitted, was also resettled in 1968-69.)

As such, excepting 51 whole inam estates and 8 part village inam estates (20.12 square miles), the abolition of which is pending because of the stay orders, all other lands in the Pudukkottai division are now under ryotwari tennure.

From the ancient times, the geographical similarity of Arantangi taluk, with its characteristic dependence on tanks, has brought about an identification of this taluk with the Pudukkottai area. This taluk, previously formed part of the Thanjavur district and has been added to Pudukkottai when the latter was formed into a separate district in January 1974.

The description of the ancient land tenures in Tamil Nadu, is applicable to the Arantangi taluk, as well as Pudukkottai. As regards the old systems of land tenure in the Thanjavur district, in which Arantangi was a taluk F.R. Hemingway says; 'The *mirasi* or village communal system of land tenure was at that time universal throughout Tanjore and has left its trace to this day. This tenure seems to have been based upon a theory of the joint communal ownership by the villages proper (the *mirasidars* as they were called) of all the village lands. In former times this generally involved the joint management by the *mirasidars* of all the fields of the village or the distribution of these at stated intervals to the villagers for their individual cultivation. It was no doubt for this reason that settlements were in early times made between Government on the one hand and the entire body of the villages on the other. It must be borne in mind however that, inspite of this communistic colouring, the system always involved a scale of individual right to specific shares in the net produce.'

¹ Gazetteer of Tanjore (1907) by F. R. Hemingway.

Arantangi also shared the effects of the break down of the central authority. Though from the 15th century A.D. approximately to the end of the 17th century, Arantangi was ruled by Tondaimans (a line different from the Pudukkottai Tondaimans), subsequently, unlike Pudukkottai, it did not retain any political identity of its own. So the land-management here exposed itself to Nayak and Maratha influences more than Pudukkottai. It also came under the rule of the British and as part of Pattukkottai taluk in Tanjavur district, directly experienced the economic experiments of the British. When the Pattukkottai taluk was bifurcated with effect from 15th November, 1910, Arantangi was made a separate taluk. Along with the Pattukkottai taluk, it formed part of the Pattukkottai division, under the charge of a Deputy Collector.

When compared with the rest of the Thanjavur district, the feudal systems of inam and Zamindari were more prominent in this taluk. A large portion of this taluk was inam and Zamindari. It is significant to note that all the 35 Zamindari estates of Thanjavur district in 1912-13, were in Pattukkottai division, and out of this 13 were in Arantangi taluk.

The inams in this area, were mostly the grants made by the Maratha rulers. A major portion of them had been made by Raja Pratap Singh and Tulsaji. In the purposes of these grants, a striking similarity to those of Pudukkottai inams, can be noticed. They differed from one another only in details. The inams of the Arantangi taluk were settled by the Special Commissioner appointed in 1859 for inam settlement. Irrespective of the origin of the possession, the continuous possession for 50 years was held to constitute valid title. Religious and charitable inams were confirmed on the existing terms, subject to the condition that they were resumable, if they ceased to serve the intended purpose. The personal inams were enfranchised at varying rates of quit-rent, with reference to the prospect, proximate or remote, of the tenure lapsing.

As regards the origin of the zamindars in this area, it is said¹.
 „.....There is no information on record regarding the origin of these estates beyond that they date from the time of the Gentu

¹ Pages 681-82 of *A Manual of the District of Tanjore—1883* by T. Venkayya; Rev.

or Nayak Rajas (Vijayanagar viceroys). Very probably, the Palayagars (Poligars), in their original capacity of feudal chieftains, were created, as in Madura, in the early days of the Nayaks i.e. in the sixteenth century. They were selected evidently from among the leading men of the Kallar and other cognate tribes, which had occupied the country at a very early period: the present holders of the estates, with one exception, are of these tribes. An arrangement of this nature was called for only in the southern part of Tanjore inhabited by lawless tribes and exposed to the raids of similar tribes, viz., Maravars and Kallars, from further south. It does not appear, that the Palayagars in Tanjore ever assumed undue authority or at all gave trouble to the Nayak or Mahratta rulers or to the British².

It is important to note that the Zamindars of the Arantangi taluk were not appointed by the British under Regulation XXV of 1802. But, in 1865, the Government authorised the issue of *istimrar sanads*¹ to convert them into holders of proprietary alienable estates. Most of the estates accordingly agreed to such a settlement.

In 1879, the important Zamindari estates in this taluk were:³

Serial number and name.	Area (acres).	Number of villages.	Peshkash.		
			RS.	AS.	PS.
1 Palayavanam ..	13,984	52	3,767	12	00
2 Singavanam ..	8,631	26	3,261	0	10
3 Attivetti ..	6,287	11	913	14	04

These estates were gradually fragmented with the result that in 1930-31, their number rose to 21. In this year, the total extent

¹ *Istimrar* is, according to Wilson, a Hindi term meaning, 'continuance, perpetuity: a farm or lease granted in perpetuity by Government or a Zamindar, at a stipulated rent, and exempt from *abwabs*; such a lease granted in charity at a quit-rent'. (*Abwabs* means 'miscellaneous cesses' and *sanad* means 'a grant, a diploma, a charter, a patent: a document conveying to an individual emoluments, titles, privileges, offices or the government rights to revenue from land, etc., under the seal of the ruling authority'. The Mohammedan government had different forms of *sanads* according to the nature of the grant.

² Page 684 of *A Manual of the District of Tanjore* (1883) by T. Venkayya Rev.

of land in the taluk had been distributed among different tenures, as detailed below¹ :

	<i>acres.</i>
1 Government (ryotwari land) and minor inams.	50,102
2 Whole inams	1,91,484
3 Zamindari	20,473
Total ..	2,62,059

Because Arantangi taluk was under the direct administration of the British, the rights of occupancy conferred on the tenants in the inam estates were made available to the tenants of this taluk. In this respect, it differed from the Pudukkottai. After independence the abolition of all the inams and estates in this taluk was completed and the ryotwari system has been fully introduced. In Arantangi taluk, and other villages of Pattukkottai, Orattanad and Thanjavur taluks, transferred to the Pudukkottai district the work of abolition of inams and estates has been completed, as detailed below :

<i>Act.</i>	<i>Number of villages.</i>	<i>Area in square miles.</i>
1 The Tamil Nadu Estates (Abolition and Conversion into Ryotwari) Act, 1948.	213	360.81
2 The Tamil Nadu Inam Estates (Abolition and Conversion into Ryotwari) Act, 1963.	186	82.58
3 The Tamil Nadu Minor Inams (Abolition and Conversion into Ryotwari) Act, 1963.	55	2.11

Land and Tenancy Reforms.—The race for individually owned land (as opposed to the common ownership that is evidenced to

¹ Page 103 of the Statistical appendix to the Tanjore District Gazetteer (1933).

have prevailed in early times), and the practice of treating land as an alienable property fostered by the old settlements, together contributed to the enervation of the peasantry. If under the Permanent Settlement this impact was quick and sudden, under the Ryotwari System, it was slow but steady. The way in which the two systems worked was the same. They resulted in an unfair competition between the peasantry and the monied class. Unfavourably placed in the competition, the peasantry was bound to lose. When the monied class, always capable of tightening its grip over the peasant became covetous of land (now an alienable commodity in the hands of the peasants) this result was inevitable.

Dharma Kumar observes¹: "That communal land tenures had existed in the Tamil areas is indisputable, but it is not at all clear how widespread they were at the beginning of the nineteenth century. At that time there were still joint villages in several Tamil districts. But by the middle of the nineteenth century there appear to have been few joint villages left, their breakdown having been hastened by the ryotwari system and land revenue and registration. Yet communal system did not disappear completely; even as late as 1921 there were still a few Tanjore villages in which the land was periodically redistributed, although long before 1890 these had become exceptions and individual ownership the rule".

As a result of the ryotwari system, the number of absentee landlords increased. Non-agricultural people gained control over land management. Concentration of land in a few hands assumed alarming proportions. The economic surplus, as and when it was created came to be invested on land, and became unproductive in a macro-economic sense. A man's savings in his heyday were usually invested in the purchase of land from poor peasants who were not able to settle down in retirement as a non-participant in agricultural activities but sure of a share of the income. These sleeping partners in the agricultural enterprise of the country assumed a position of taking decisions on vital matters such as

¹ Pages 16-17 of '*Land and Caste in South India*' by Dr. Dharma Kumar (1965).

how much a peasant should claim for himself, which crop is to be cultivated, how much money is to be spent on manures. The extravagance of the peasants also contributed to the loss of their lands. A class of cultivating tenants, sub-tenants, agricultural labourers emerged. The sub-division and fragmentation of land can also be included in this list. Again, despite the attractive concept of 'peasant proprietorship' under the Ryotwari System the condition of peasants in due course became similar to that of tenants in zamindaris.

The far-reaching implications of this stealthy metamorphosis were not understood in time. When they came to be understood, we were not independent to take remedial measures. By the time we became independent the problem had become much too complicated to be set right easily. And yet the Government has turned earnestly to land reforms.

A major difficulty involved in this task is that we have had to aim at two objects, which call for different approaches. The first is the consolidation of holdings, and the second, land ceiling.

Consolidation of Holdings.—Land in the hands of the peasantry has become uneconomic due to sub-division and fragmentation. The need for a consolidation of these holdings has been frequently felt by Government. In the words of Dr. B. S. Baliga¹: "Time and again our Government have had to consider the expediency of legislation or other measures to check sub-division and fragmentation and time and again they have had to decide to leave the matter as they are, having found that the conditions in our province are different from what they are in other provinces where such measures have been deemed necessary. Internal pressure such as the writings of Dr. Slater and a Resolution of the Legislative Council of 1917 as well as external pressure such as the Bombay Bill, the Punjab scheme, the Central Provinces and the Punjab Consolidation of Holdings Act and the recommendations of the Royal Commission on Agriculture, continuously fanned the members of controversy but, everytime, everything ended in smoke. . . ."

¹ Page 142 of *Studies in Madras Administration Vol. II.*

The reason is clear. Small peasants have become very jealous of the land possessed by them due to the individualistic elements of the ryotwari system.

When resettlement was going on in the Tiruchirappalli district, it was decided to give trial to 'consolidation' of holdings by voluntary consent'. The Settlement Officer reported that the experiment was not a success. He reported that only a high ranking officer who could inspire confidence among the villagers and who could leisurely sit with them preaching the benefits of consolidation might, perhaps, succeed. Upon this, the then Revenue Secretary, remarked¹: "I went out into the village.....and discussed this with villagers. An ordinary ryot on being questioned as to why he should not arrange with the members of his family that they should retain the landed property in the hands of one of the sons and compensate the others in some other way replied, 'If I suggested that to my brother he would cut my throat'. That is, I think, the answer to many of the paper proposals. The country is not ready for them".

Many instances can be quoted for the failure of attempts in this direction. But they lead to only one conclusion. No consolidation of land holdings in this country can be possible without considerably changing the concept of land ownership, that has developed in the minds of our peasants.

Ceilings on Land.—The other side of the problem is that large extents of land have remained in the hands of a few persons against the principles of social justice. These disparities in the possession of land have called for removal. So, on one hand an attempt has had to be made towards a consolidation of holdings in the interests of production and, on the other, ceilings have had to be fixed on the possessions of land, which naturally precipitates the process of sub-division and fragmentation although in the interest of social justice.

The celebrated resolution of the Indian National Congress on land reforms in its session at Nagpur in 1959 was followed by ceiling enactments in most of the States.

¹ *Studies in Madras Administration* (1960) Vol. II Page 145.

In Tamil Nadu, the Tamil Nadu Land Reforms (Fixation of Ceiling on Land) Act, 1961, (Act 58 of 1961) was passed. This act, as amended subsequently, has helped considerably to remove the disparities in the ownership of agricultural land in the State. The Principal Act of 1961 commenced with effect from 6th April 1960. It fixed a ceiling of 30 standard acres of land for each family consisting of five members and below. For every additional member, 5 standard acres were allowed, subject to the maximum ceiling of area of 60 standard acres for a family. The amendment made by the Act 17 of 1970, refixed the ceiling limit at 15 standard acres for a family of five members and less. This Act commenced with effect from 15th February 1970. Subsequently, the maximum ceiling for any family having more than five members was also reduced to 30 standard acres.

Under the 1961 Act certain categories of lands were exempted from its purview. They are indicated below :—

1. Lands held by the Central Government or any State Government or any local authority ;
2. Lands held by any charitable or educational institution of a public nature ;
3. Lands held by any trust ;
4. Lands held by any University constituted by any law ;
5. Lands in any hill area ;
6. Lands covered by plantations in existence on the date of the commencement of this Act ;
7. Lands covered by orchards or topes or arecanut gardens on 1st July 1959 so long as they continue to be orchards, topes or arecanut gardens ;
8. Lands covered by fuel trees on the date of commencement of the Act, so long as they continue to be used for such purposes ;
9. Gramdan land and land donated for purposes of the Bhoodan Yagna ;

10. Lands used exclusively for dairy farming or live-stock breeding in respect of which the Land Board has granted permission ;

11. Lands interspersed among plantations or contiguous to any plantation in existence on the date of the commencement of the Act and in respect of which the Land Board has granted permission ;

12. Lands awarded for gallantry to defence personnel ;

13. Lands used for the cultivation of sugarcane and in respect of which the Sugar Factory Board has granted permission ; and

14. Lands exclusively used for grazing upto an extent of fifty acres and assessed at Rs. 1.25 and below per acre.

Some of these exemptions were subsequently reviewed by the Government and were withdrawn or modified. By Tamil Nadu Act 41 of 1971, the exemption in respect of lands used for sugarcane cultivation and for grazing was withdrawn. By Tamil Nadu Act 20 of 1972, the exemption in respect of lands in hill areas was also withdrawn. By Tamil Nadu Act 37 of 1972 the exemption in respect of Public trusts was modified and separate ceiling limits were fixed for various categories of Public trusts. The public trusts were also prohibited from acquiring agricultural lands afresh on or after 1st March 1972, that is, the date of commencement of Tamil Nadu Act 37 of 1972. By Tamil Nadu Act 39 of 1972 the exemption in respect of lands used for dairy farming and livestock breeding was also withdrawn with effect from 1st March 1972. So far as Pudukkottai District is concerned the continuance or withdrawal of most of these exemptions seems to have had no impact because there were no such cases in the district, except, perhaps, one case of public trust from which surplus lands have been taken over as a result of the modification of the exemption in respect of Public trusts by Act 37 of 1972 as indicated in the succeeding paragraphs.

The surplus land taken over by the Government from the big holdings, is assigned to landless agriculturists. The details of the

Implementation of these acts in the Pudukkottai district are furnished below :—

<i>s on 1st Septem- ber 1975.</i>	<i>Act 58 of 1961.</i>	<i>Act 17 of 1970.</i>	<i>Act 37 of 1972.</i>	<i>Total.</i>
(1)	(2)	(3)	(4)	(5)

i. Total No. of persons affected consequent on the implementation of the ceiling fixed. 40 99 1 140

ii. Total extent declared as surplus. (IN ACRES) 1118-28 1311-93½ 1492-94 3923-15½

iii. Total extent taken possession of by the Government. 931-51 1058-79½ 1492-94 3480-24½

iv. Total amount of compensation paid.

	RS.	RS.	RS.	RS.
(a) In cash ..	1,028-52	879-67	..	1,908-1
(b) In bonds..	3,43,650	1,74,600	..	5,182,50

v. Extent of land assigned [out of total extent shown, in column (iii)] 1,417-46 (acres).

vi. No. of persons to whom assignments have been made. 946

vii. Details of assignment :

				<i>No. of persons.</i>	<i>Extent (acres).</i>
(a) Scheduled Caste ..	..	..	..	308	460-12
(b) Scheduled Tribe ..	..	..	..	..	..
(c) Backward Class ..	..	..	..	511	753-30
(d) Others ..	..	..	..	127	203-84
Total ..				946	1,417-46

Bhoodan.—A kindred development is represented by the Bhoodan movement. Started by Acharaya Vinoba Bhave, the basic principles of this movement are that the land being an important means of production, should be owned by society. The movement implies that the private ownership of land is undesirable. Redistribution is sought to be brought about under the movement by voluntary gifts of land by big landowners. The Tamil Nadu Bhoodan Yagna Act, 1959, facilitates the donation of lands and settlement of landless agriculturists in these lands.

Only an extent of 379.80 acres has been obtained by Bhoodan donations in the area now comprised in the Pudukkottai district. Out of this, a compact block of 33.77 acres has been given to 25 landless agricultural families. For the development of this block, a programme for Rs. 1,19,110/- has been prepared and sent to the Tamil Nadu Sarvodaya Mandal, Madurai, which is responsible for the development of blocks of Bhoodan lands.

Protection of Cultivating Tenants.—The Tamil Nadu Cultivating Tenants Protection Act, 1955, is designed to prevent the eviction of cultivating tenants without adequate cause. In Pudukkottai district during the year 1974-75, 127 cases were filed under this Act. Only in two cases the eviction was found justifiable and carried out accordingly. In all other cases the handing over of possession of land has been stayed by the Ordinance 1 of 1975 (Act 10 of 1975), which is in force from 16th January 1975.

The Occupants of Kudiyiruppus.—A number of tenants; agricultural labourers had been permitted to reside in the midst of the fields of the landowners, in the interest of the farming operations. To protect these labourers from being thrown out of their households, the Government of Tamil Nadu passed the Tamil Nadu Occupants of Kudiyiruppu (Protection from Eviction) Act in 1961. The life of this Act was being extended periodically. Now by the Act, 23 of 1975, the Government of Tamil Nadu have re-enacted the principal Act of 1961, permanently.

A legal step taken by the Government of Tamil Nadu, which is more important for kudiyirupputars than the protection from eviction is the passing of the Tamil Nadu Occupants of Kudiyiruppu

Conferment of Ownership) Act, 1971 (Act 40 of 1971). Subject to the provisions of this Act, the Kudiyiruppus and the superstructures thereon which were under the occupation of the agriculturists and agricultural labourers on 19th June 1971, belong to them free of all encumbrances.

In the Pudukkottai district, 2,915 pattas have been distributed under this Act, as detailed below (as on 15th July 1975) :

<i>Name of the taluk.</i>						<i>No. of pattas issued.</i>
(i) Pudukkottai ..	..	..	..	..	..	8
(ii) Alangudi ..	..	..	..	..	..	30
(iii) Tirumayam ..	..	..	..	..	..	138
(iv) Kolattur ..	..	..	..	..	..	85
(v) Arantangi ..	..	..	..	..	..	2,654
Total ..						2,915

A category wise distribution, of the number of pattas issued is furnished below:

						ACRES.
(i) Harijans ..	..	..	..	..	..	739
(ii) Backward Classes ..	..	..	..	..	..	1,884
(iii) Others ..	..	..	..	..	..	292
Total ..						2,915

Revenue from land.—Land Revenue or assessment on land was the mainstay of State finance even in the first quarter of the twentieth century. The commercialisation of agriculture and industrial growth have, however, reduced the importance of the land revenue. But our economy continues to revolve around agriculture. So the other revenues, even though not direct assessments on land yet emanate from land-use. In the days of the British, when land revenue was the only major source of revenue, the system of Revenue Administration was also very simple. Special staff took up the

survey and periodical settlement of the land revenue. The collection of this settled amount of revenue was left to the district collectors. There were the Divisional Officers to assist them. At taluk level, the Tahsildars looked after the collection work. Firkas or groups of villages were under the charge of the Revenue Inspectors, who supervised the work of the village officers. (This hierarchy still exists in the Revenue Department of this State, though in all the important districts, there is a District Revenue Officer to attend to the revenue matters). The total amount of revenue for each village, being more or less permanent, chances of sudden fluctuations were rare. Then, there were revenues from 'Stamps' and 'Registration', which also originated mainly from the transactions on land. In the pre-independence period 'Abkari', was another important source of revenue. In the closing years of the British rule, the revenue under this head, exceeded even the land revenue. The income tax, which had become prominent in the British India, was not levied in the former Pudukkottai State.

The trend of important sources of revenue in the Pudukkottai State may be known from the following table.

Year.		Total Revenue of the State.	Land Revenue	Excise.	Registra- tion.	Stamps.
		RS.	RS.	RS.	RS.	RS.
(1)		(2)	(3)	(4)	(5)	(6)
1911-12	..	16,70,287	10,43,736	1,66,182	31,889	1,86,234
1915-16	..	18,71,088	10,13,677	2,37,135	34,069	2,23,613
1920-21	..	21,43,203	9,92,052	3,40,324	36,230	2,71,642
1925-26	..	22,78,941	9,08,569	3,41,273	43,552	2,37,145
1930-31	..	22,47,736	9,29,741	3,24,420	34,616	3,19,769
1935-36	..	20,79,151	9,69,134	2,52,467	28,486	2,91,374
1940-41	..	21,92,471	10,17,479	2,78,804	30,424	2,80,221
1945-46	..	33,19,988	7,33,985	11,51,032	46,493	4,16,037
1946-47	..	39,22,527	10,37,836	11,49,993	50,006	4,29,255

Pudukkottai being a newly formed district, separate figures of collection of taxes, for the years before 1974-75 are not yet available. The particulars of important items of revenue of the State, shown in the following table, may help in knowing the general trend which should find an echo in the Pudukkottai district also.

Imports of Revenue in Tamil Nadu—Particulars of collection.

Items of Revenue.	(RUPEES IN LAKHS.)				
	1947-48	1952-53	1957-58	1971-72	1973-74
	(A)	(B)	(C)	(D)	(E)
1. State Excise	1,069 (21.1)	47 (0.8)	28 (0.4)	76 (0.3)	2,223 (5.6)
2. Other taxes including General Sales Tax.	1,030 (20.3)	1702 (28.1)	1,563 (25.0)	7,169 (30.7)	12,097 (30.2)
3. Share on taxes on income from centre.	535 (10.6)	942 (16.1)	616 (9.8)	1,460 (6.2)	3,780 (9.4)
4. Land Revenue ..	530 (10.5)	600 (10.3)	577 (9.2)	528 (2.3)	449 (1.1)
5. Stamps and Registration.	415 (8.2)	..	429 (6.9)	1,335 (5.7)	1,767 (4.4)
6. Agricultural Income Tax.	..	..	130 (2.1)	162 (0.7)	201 (0.5)
7. Central Grant-in-aid.	280 (5.5)	9 (0.2)	6 (0.1)	2,876 (12.3)	3,642 (9.1)
8. Motor Vehicle Tax	167 (3.3)	426 (1.3)	454 (7.3)	1,683 (7.2)	2,299 (5.7)
STATES TOTAL.	5,070	5842	6,256	23,339	40,034
REVENUE.				43,808	48,630

N.B.—Parentheses indicate the percentage of the amount to the total amount of revenue in the year.

(A) Madras Administration Report—1947-48—Part II, pages 29 and 34.

(B) Madras State Administration Report—1952-53—Part II, Pages 21 and 22.

(C) Budget Memorandum for 1959-60—Pages 26-30.

(D) Annual Statistical abstract for Tamil Nadu—1967-68 and 1968-69; and Tamil Nadu State Administration Report—1968-69—pages 47-49.

(E) Tamil Nadu—An Economic Appraisal—1975—Volume II.

The State's Revenue are divided into two categories, Tax Revenue and Non-Tax Revenue. Non-Tax Revenue includes grants from the Central Government, miscellaneous adjustments, etc.

Tax Revenue is of two classes : Revenue collected by the Central Government to be shared among the States, and revenue collected by the State Governments.

In the first category are included Income-Tax, Estate Duty and Union Excise Duties.

Income-Tax.—Out of the total collection of this tax, 60 per cent is distributed among the States, according to a ratio. The general rule is that 90 per cent of the divisible pool is distributed on the basis of the population of the States and the balance of 10 per cent is distributed on the basis of the collection.

The Indian Income Tax Act was extended to the former Pudukkottai State area from 1948-49 (assessment year 1949-50), before which no income tax was levied in its territories. There are two Income Tax Officers incharge of this district. The main source of income of the assesseees of this district is money-lending, which is carried on mostly by the Nattukkottai Chettiars. They have other income also from places like Malayasia, Singapore, etc. The amount of income tax collected in the Pudukkottai district, after its formation is :

1973-74 (from 15th January 1974). Rs. 23,72,000.

1974-75 55,85,000.

Central Excise.—There is a Superintendent of Central Excise at Pudukkottai. The main commodities on which the Central Excise duty is collected are (1) unmanufactured tobacco for chewing purposes; (2) manufactured tobacco products, (3) matches, (4) cotton yarn, (5) wood screws, (6) steel furniture, (7) rubber products, (8) paper and (9) biscuits.

There are about 9 factories manufacturing tobacco product and they yield a revenue of more than a lakh rupees per month. The products manufactured here are consumed in the whole of

India and Malaysia. Tobacco is not grown anywhere in this district. Raw tobacco is purchased by the manufacturers from Meenampalayam, Palladam and Dharapuram of Coimbatore district, and Vedaranyam of Thanjavur district.

There are about 9 cottage match factories spread over the entire district. The revenue from these is about 12 to 15 thousand rupees a month. For these factories also, raw materials are purchased only from outside the district and the products are sent to the different parts of the country.

There are three cotton yarn mills. Cauvery Spinning Mills and Pudukkottai Textiles are located near the headquarters of the district and Nadiambal Textile is at Arantangi. These units yield a revenue of about Rs. 50,000 per month.

Paper board and wrapping paper are produced out of waste paper in a paper board factory at Umayalpuram of Tirumayam taluk. This unit yields about Rs. 10,000 per month.

About 12 to 15 thousand rupees of revenue comes from a unit manufacturing wood screws in the Industrial Estate, Pudukkottai.

There is also a unit manufacturing rubber products used for retreading types at Pudukkottai, yielding about Rs. 10,000 per month.

There are some other small units also. Now that the State Government have got detailed schemes for encouraging small scale industries, declaring this as an industrially backward area, some more units will come into being shortly, yielding more revenue under this item.

The amount of Central excise duties collected in this district is as follows:—

Year.					<i>Amount collected in Pudukkottai district.</i>	<i>Amount collected in the Tamil Nadu.</i>
					(2)	(3)
					(RS. IN LAKHS.)	
1971-72	..	..	..	..	31	3,277
1972-73	..	..	..	..	38	3,266
1973-74	..	..	..	..	53	3,568
1974-75	..	..	..	..	33	4,777

In the revenue directly collected by the State, the following taxes are included :—

- (a) Agricultural income-tax.
- (b) Land revenue.
- (c) State Excise duties.
- (d) Sales tax.
- (e) Stamps.
- (f) Registration fees.
- (g) Taxes on vehicles.
- (h) Other taxes and duties (entertainment tax, betting tax, electricity duties, etc.)

From the year 1955, the agricultural income from the plantations has been taxed separately. In 1958, this was extended to non-plantation crops also. There is no plantation in the Pudukkottai district. There were 2,140 assesseees in this district for 1974-75. The amount realised during this year was Rs. 1,26,282. The whole district is in the jurisdiction of the Agricultural Income-tax Officer, Pudukkottai.

As regards Land Revenue, we have already seen that it has fallen considerably after independence. The Government of Tamil Nadu waived the basic assessment on dry lands from the year 1967-68. From the fasli 1381 (1971-72) the land revenue component of the consolidated wet assessment was also waived in respect of persons who own 5 acres and less of wet lands. From the fasli 1382, the basic assessment on 'Manavari' lands has also been waived¹. Of the Rs. 244 lakhs of land revenue collected in Tamil Nadu during 1974-75, Rs. 26.08 lakhs were collected in Pudukkottai district.

¹ G.O Ms. No. 2059, Revenue, dated 19th July 1972.

The present rate of surcharge that is levied in each Panchayat Union is furnished below :

<i>Serial number and name of the Panchayat Union.</i>	<i>Rate of Surcharge for every rupee of L.R.</i>
(1)	(2)
	RS. P.
1. Tiruvaranguləm	1-06
2. Karambakudi	1-05
3. Arimalam	1-20
4. Tirumayam	1-75
5. Ponnamaravathi	1-00
6. Annavasal	1-00
7. Kunnandarkoil	0-75
8. Viralimalai	1-00
9. Arantangi	1-55
10. Avudayarkoil	1-55

व्यवसाय कर

The Pudukkottai commercial taxes district was formed as per G.O. No. 214, Revenue, dated 18th January 1974. This includes the entire Pudukkottai district and also the Manapparai taluk of the Tiruchirappalli district. The revenue realised from the Pudukkottai district, by way of commercial taxes during the year 1974-75 was Rs. 87.26 lakhs. This is 33 per cent more than that realised during the financial year 1973-74.

In the entire Tiruchirappalli division, comprising seven commercial taxes districts, the total revenue derived under all the commercial taxes Acts, for the year 1974-75 is Rs. 21.39 crores, whereas the revenue realised from the Pudukkottai revenue district is only Rs. 87.26 lakhs.

The poor percentage of contribution by the Pudukkottai revenue district is because of its commercial and industrial backwardness. But, there is scope for improvement as many new industries are likely to be started in this district, which has been declared as industrially backward district, for the purpose of concessions by the Government of India.¹

Due to the re-introduction of prohibition, the revenue from excise duties has fallen very much.

The revenue from the taxes on motor vehicles is also an important source for the State. Rs. 85.69 lakhs were collected under this head in the Pudukkottai district from 14th January 1974 to 30th June 1975².



¹ Report from Commercial Tax Officer, Pudukkottai, dated 17th July 1975.

² Report, dated 24th July 1975 from the District Transport Officer, Pudukkottai.

CHAPTER XII—LAW AND ORDER AND JUSTICE.

About seven miles from Pudukkottai town is the Alurut-timalai from which criminals used to be hurtled to death by the justicers of Pudukkottai's early rulers. We hear of other forms of summary justice in early Pudukkottai. What were the crimes most common here ? What sociological reasons peculiar to Pudukkottai led to these crimes ? What was the system of judicial administration under the Tondaimans ? The history of the formation of the judicial, police and jail departments in Pudukkottai and the links of these departments with those of British India forms an interesting segment of the history of law, order, and justice in the country.

Administration of Justice

The administration of justice in a given society reflects the depth of its rational thought; the principles on which it regulates the rights and duties of its members; the type of behaviour that as a collective body, it expects each individual to adopt; the means it adopts to insist on this; the nature of aberrations or deliberate violations; the remedial measures or punishments used and their efficacy. A study of the system of justice and its application in society can, therefore, reveal the collective mind of a people.

Crime and Punishment in Early History—A well-developed concept of justice prevailed in Tamil Nadu even during the ancient days of the Cholas and Pandyas. It envisaged a general order of behaviour or *karma* to which no one, not even the king, could be an exception. Tradition contains several indications of this. The *Manu Needhi Cholan*¹ decreed that his (the king's) only son be run over by his chariot for an injustice rendered to a cow. To expiate a seeming offence, 'Porkai' Pandyan cut off his own hand. The moment he was convinced of an injustice done by him, Pandian Nedunchezhan² fell down from his throne and died. In his immortal words, Ilangovadigal describes the scene in *Silappadikaram*³.

¹ Tiruttondar Puranam: Manu Niti Kanda Puranam, St. 27; Silappadikaram XX: 53 to 55.

² Circa 210 A. D.

³ வழக்குரைகதை—வரி 72—78.

... மணிகண்டு
தாழ்ந்த குடையன் றளர்ந்த செங்கோலன்
பொன்செய் கொல்லன் றன்சொற்கேட்ட
யானே வரசன் யானே கள்வன்
மன்பதை காக்குந்த தென்புல காவல்
என்முதற் பிழைத்தது கெடுகவென்னுயுளென
மன்னவன் மயங்கி வீழ்ந்தனனே

The moral obligation fixed upon the king relating to this, is stressed by Tiruvalluvar¹:

“தக்காங்கு நாடித் தலைச்செல்லா வண்ணத்தால்
ஒத்தாங் கொறுப்பது வேந்து.”

He is a King, who having equitably
examined a wrong done, suitably
punishes the culprit to avert its recurrence.

Tiruvalluvar, not only upholds the significance of justice, but also specifies how and why it should be administered.

‘Crime’ is an act punishable by law. But in early days, there was no system of ‘legislation’ in the sense of the ‘making of laws’. The collective sense of rectitude was strong. It had its roots in *Aranool* (அறநூல்) or moral books. The social order knew a rigid stipulation of duties and privileges, although there was no written law as such. Crime and the punishment to be imposed were evaluated and determined with reference to the *Aranool*, in the context of the days. *Ayai* (அவை) in the capital town and *Manram* (மன்றம்) in the villages were the courts of justice. The king was the fountain head of justice, and personally discharged his obligations of justice (நீதிபரிபாலனம்). Theft, adultery, negligence of trust property, murder etc., were considered very serious crimes.

While we see that the values of justice had been fully realized, its processes were not free from imperfections. N. Subramanian says²: “The Tamils had their own notions about crimes and punishments. They felt that punishment was necessary; imprisonment and other inflictions were more punitive than reformatory and they believed that it was not wrong for a king to punish his

¹ 561 (வெருவந்த செய்யாமை) திருக்குறள் 561.

offending subjects, for 'it is only like removing the weeds from a flourishing corn field'. Punishing evil doers for protecting the subjects was not a stigma but a duty of the king." He concludes that "mostly in the ancient days the tendency was to make the punishments err on the side of severity rather than on the side of leniency". But this was common in the ancient and medieval periods in the whole country.

"Village assemblies had small committees of judges known as *Nyayattar*. The disappointed party could appeal to the administrator of the Nadu. There seems to have been no clear distinction between civil and criminal offences. Offences against individuals were regarded as offences against the community and hence the penalty imposed on the offender often consisted of payments of money or gifts of land or lamps to temples²."

The king's court was meant only for extraordinary cases like offences against the person of the king or any member of the royal family or such other serious crimes. The basic units of administration of justice were the villages. The village assemblies had the power to decide civil and criminal cases.

Justice in the Tondaiman Raj.—When we move on to the period after the 14th century, we find that the decay of village assemblies³ affected the system of administration of justice also, when chieftains and their officers came into prominence. "The chieftains administered civil and criminal justice in their territories. After the decay of the local assemblies, the temple trustees exercised some sort of judicial authority. They tried petty criminal offences, but their jurisdiction appears to have been confined to the temple servants⁴."

The Nayak-wave, which was the first to disturb the equilibrium of Tamil Nadu introduced elements of absolute rule by the kings, "untrammelled by any popular assembly, though their powers were restricted to some extent by the *Dharmasastra* or the Hindu codes, and by public opinion⁵."

¹ Page 195 of *Sangam Polity* (1966)

² Page 647 of *A Manual of the Pudukkottai State* (1940)

³ See chapters on 'General' and 'Revenue Administration'

⁴ Page 741 of *A Manual of the Pudukkottai State* (1940)

⁵ Page 735 *ibid.*

The administration of justice under the Tondaimans was greatly on the lines of this Nayak system, until it was changed by Sir A. Sashiah Sastri, Diwan and Diwan-Regent of Pudukkottai from 1878-1894. "The V. jayanagar system of judicial administration survived with slight modifications under the Tondaimans during the first half of the nineteenth century¹."

V. Subbier (Civil Judge, Pudukkottai in 1882-83) wrote²: "In this State as may be gathered from old records and tradition, regular Courts of Justice came into existence more than 70 years ago. In the very beginning, there was but a single seat of justice designated *Dharmasanam*. This is supposed to have been constituted 100 years ago in the time of Regunada Tondaiman, the grandfather of our present Maha Rajah, who on account of his virtues and patronage of learned Pandits was surnamed king Bhoja. The procedure and the powers of this tribunal cannot be accurately ascertained. But it is clear from its judgements which remain, that it consisted of a number of persons headed by or under the guidance of a Brahmin..." He adds³: "In course of time, when the business of the State grew more various and complicated and litigation increased, the ruler would naturally have sought the assistance of councillors and learned men. It is, therefore probable that the *Dharmasanam* was constituted to help the king in the decisions of cases and to relieve him of the investigation and trial of suits by appointing a number of persons specially for that purpose. This tribunal was originally the sole fountain of civil and criminal justice in the State".

But this somewhat rosy picture depicted by Subbier on how the 'fountain of civil and criminal justice in the State' would have been in the beginning of the nineteenth century, does not stand the test of investigation. Major Blackburne, who was called 'father' by the Tondaiman princes and who, in turn, considered them his children, has given a different picture of how it functioned, in his report, dated 31st December, 1808⁴. "The administration of justice in the Tondaiman's country was not less defective than that of

¹ Page 1741, of a Manual of Pudukkottai State (1940)

² *Ibid.*

³ Appendix to the Report on the Administration of Pudukkottai 1832-83

⁴ Page 834 of *A Manual of the Pudukkottai State*, (1940),

Revenue....because the only regular officers of justice were the Revenue officers....They held no regular courts, were not aided by Pundits or Shastries, kept no record of their decisions and did not report them to the Government....Injuries committed by men of influence or in power they never noticed; and they received no complaints against the great Jaghirdars who exercised without restraint a judicial authority over the lands in their possession..”

But Major Blackburne did not make any serious attempt to reform this branch of administration. “In 1810, a supreme tribunal, named *Nyaya Sabha*, was established, and in 1811, a Kotwal's office was instituted at the capital which was a Police Station, a Magistrate's Court, and a Civil Court of Small causes rolled into one. About 1813, the *Danda* and *Mudra Sabhas* came into existence. The *Nyaya Sabha* exercised both original and appellate jurisdiction. In 1845, the *Huzur Adawlut* court became the Appeal court. In the place of the *Mudra Sabha*, small cause court in the Town and *Munsiff's* courts at each of the Taluk Headquarters were established. The old *Nyaya Sabha* became in 1866, the civil and sessions court¹....”

Introduction of the British apparatus.—The credit for having done away with the inveterate and obsolet easpects of the administration of justice in the Pudukkottai State, goes to Sashiah Sastri.

Legislation.—Before he took charge, there were only two Regulations in the Pudukkottai State: One on the organization of Police and another on the Registration of Assurances. Except these, there was no legal frame work which Pudukkottai could call its own. In the words of Sashiah Sastri², “With the exception of two Regulations of very recent date, namely, one for Police and the other for Registration of Assurances, there were no written laws at all. Their absence was extraordinary and both the people and authorities were in the dark as to what the law of the State was. The British Regulations were taken for granted as their guides by the courts and Revenue Officers and their provision freely administered without even a royal warrant authorizing such a course.” He realized the urgency for bringing

¹ Page 865 of *A Manual of the Pudukkottai State* (1940).

² Paragraph 176 of the Report on the Administration of Pudukkottai 1879–80

about a good legal frame work for the State to control and regulate the proceedings of the executive and to enable the courts of justice to have clear guidelines before them. He made the beginning in the year 1879-80 itself. The Regulations were passed for (i) Recovery of arrears of revenue and all monies of other descriptions recoverable on behalf of the State, (ii) Acquisition of land for public purposes, and (iii) Levy of institution fees in the courts of civil judicature. All of them were modelled on British enactments. By the levy of institution fees he created a revenue for the State and also reduced vexatious litigation to a remarkable extent.

In the year 1880-81 were drafted eight important Regulations, on (i) The Earth-Salt Monopoly, (ii) The Jungle conservancy, (iii) Power of Revenue Officers to issue summons, (iv) The Conservancy and Sanitation of Town and Villages, (v) Recovery of Rent by Landlords by Summary process, (vi) Amendment of the Registration Act and Rules ; (vii) Compulsory Labour in Emergency, and (viii) Punishment of Minor Revenue Offences as in the British Regulations IX of 1822 and VII of 1828. All the draft Regulations were sent to the Karbar, the Civil Judge, the Judge of the Appeal Court and to the Heads of Departments in the case of special subjects for criticism and remarks¹. But out of these eight, only the one on the manufacture and sale of earth-salt, was passed in 1882-83. In that year, another Regulation was also passed to declare distinctly the Acts of the British Indian Legislature relating to civil and criminal matters which were to be followed in the courts of the State, having regard to the customs, special circumstances and constitution of the State and subject to modifications, reservations, and rules as may from time to time, be issued by the Huzoor Adawlut Court².

Among the other Regulations enacted during the period of Sashia Sastri, the following are important :—

(i) Breaches of Contract Regulation, 1891 (This was almost a reprint of the British Act and provided for the punishment of breaches of contract by artificers, workmen, labourers, etc. It came to force from 1st January, 1892).

¹ Paragraph 142 of the Report on the Administration of the Pudukkottai State for 1880-81.

² Paragraphs 207 and 208 of the Report on the Administration of the Pudukkottai State for 1882-83.

- (ii) Transfer of Immovable Property Regulation, 1892.
- (iii) Small Causes Court Regulation, 1892.
- (iv) Arms Regulation, 1892.
- (v) Pudukkottai Extradition Regulation, 1892.

Thus, a process of legislation was introduced in Pudukkottai by Sashiah Sastri. From almost nothing, he created the foundations for a legal framework, capable of being further built upon in due course of time.

Courts.—The re-organisation of the courts made by Sashiah Sastri is a landmark in the history of the administration of justice in Pudukkottai.

Owing to the control of the Political Agents, and the nearness of the British districts, the British law and legal procedures were greatly influencing the people of the Pudukkottai. The Civil Procedure Code of India, Act VIII of 1859 was observed. The standard English law books and the law reports of British Indian cases formed the guide of the Bench and Bar of the State¹. Similarly, the Penal Code and the Code of Criminal Procedure of British India were also followed with slight modifications. By tradition, no capital punishment was imposed in any case, life-imprisonment being substituted instead. (Subsequently, capital punishment was introduced in the State²; but the British Government were not in favour of allowing the Raja to exercise the royal prerogative of altering a capital punishment after its confirmation by them³. This was not, acceptable to the Raja and so capital punishment was not after all resorted to in the State.)

But the Raja Ramachandra Tondaiman, known primarily for extravagance and maladministration, paid little attention to judicial work. On the 3rd May, 1855, the Political Agent wrote to the Sarkil⁴: "... Frequent complaints are made to the Political Agent that the Judges neglect their courts, because they are in constant attendance on the Rajah and go out hunting with him. If such

¹ Paragraph 73 of the Report on the Administration of the Pudukkottai State for 1878-79.

² National Archives Records, New Delhi.

³ Ibid.

⁴ Darbar Records, Pudukkottai.

irregularities continue, the only recourse the Political Agent can have is to recommend that the State may be placed under the jurisdiction of the Company's courts."

Referring to the pendency of the appeal cases in the Raja's court the Political Agent wrote to the Chief Secretary Madras on 1st February 1856: ¹ "... These appeals should be decided by the Raja himself sitting with the Sarkele and one of the Judges by turn. But the Raja will not attend to this duty. A steady application to business is directly opposed to the character of his mind, which though not wanting intelligence, is restless and frivolous."

The practice of associating the Sarkil with judicial work arose because Ramachandra Tondaiman was very young when he came to power and the Sarkil had to do the judicial work also for him.² Because of the British influence the administration of law had become too technical and this was the reason why a Judge had a place in the Raja's court as a member. The Sarkil worked in an ex-officio capacity and Judge was there as a law member. The Raja's court (Huzoor Adawlut Court) was the only court of appeal and direct participation of Raja meant only that his words were final, both in theory and practice.

When Sashiah Sastri took over, there were on the civil side (i) three Munisiff Courts, one for each taluk, (ii) one small Cause Judge's Court for the town and suburbs and (iii) one Civil Judge's Court. The Raja's court, as the only appellate court, was to receive appeals against the orders of all these courts. On the criminal side, there were (i) Third Class Magistrates, (ii) Second Class Magistrates, (iii) District Magistrate and (iv) Session Judge. The Raja's appellate court was the final criminal court.

About the Raja's appeal court, Sashiah Sastri wrote³ "... For obvious reasons, a highest judicature in which the Ruler *in propria persona* and his Minister are ex-officio judges and a standing majority against a single professional judge is an anachronism, which cannot

¹ Darbar Records Pudukkottai.

² Appendix to the Report on the Administration of Pudukkottai 1882-83.

³ Paragraph 224 *ibid*.

be permitted to last long. The former must gracefully retire to their natural and dignified position of law-giver and the highest court of Appeal must be composed of trained judges, whose perfect independence must be ensured if public confidence is to be commanded. I trust ere long to advise a scheme which will fulfil these objects."

But his proposals for a re-organization of the judiciary in the State materialised only in 1887. The proposals were approved by the Government of Madras in 1886 and came to effect from the 1st January, 1887. The important aspects of the revised scheme were:

(1) The Civil and Sessions Court and Huzur Adawlut Court were amalgamated into one court by name 'Chief Court of Pudukkottai' with a Chief Judge and two more judges.

(2) One of the Judges, by turns was to work in the original side.

(3) In sessions cases, all sentences of imprisonment for life and all sentences of forfeiture of property had to be submitted to the Diwan-Regent for confirmation.

Sashiah Sastri also made it a rule to have judgments written and declared as soon as the cases were heard instead of making the parties wait until the last day of the month. The rules regulating the qualifications emolument and levy of fees on certificates issued to legal practitioners were framed and published in the State Gazette. They took effect from the 1st of January, 1887.

The structure of the courts was again changed from the 1st of July, 1889¹. All judicial work was concentrated in the Chief Court so as to give the Judges of that court sufficient work. The Munsiff Courts were abolished. The Chief Court was given Small Cause jurisdiction over money suits of value not exceeding Rs. 100². Thus, all the judicial work of the State was brought under one roof. The Chief Court took cognizance of and decided every case from the lowest to the highest value. About the working of this new arrangement Sashiah Sastri wrote³: "I trust that the results obtained

¹ Tamil Nadu Archives Records, Madras.

² Paragraph 29 of the Report on Administration of Pudukkottai 1888-89.

³ Paragraph 47 of the Report on the Administration of Pudukkottai, 1889-1890.

under the change as above narrated, would be viewed with satisfaction. The disposal of the smallest suits by the highest judges is in itself a source of confidence to the public. The raising of the small cause jurisdiction to suits of Rs. 100 has been also a great boon. The new arrangement, moreover, have had the intended effect of giving to the Judges a fairly equal share of work, and the work of each was never so heavy, as to necessitate hurrying through or be delayed." This arrangement came to stay till the end of his period. The spirit with which he entrusted the task of administration of justice to the professional hands and restricted the role of the executive head of administration, (though he himself became Diwan-Regent and the head of the State) has made him a memorable personality in the history of the Pudukkottai State.

Police.—Regarding the old Police system in South India, it is said.¹ "The system of police which was found to prevail throughout Southern India when the English first occupied it was the ancient hereditary Cauvaly system. Under this certain predatory tribes undertook to protect the property of the remainder and even to make good losses incurred by them. But on the other hand the cauvalgars levied contributions and taxes from all property to which this system was applied. . . . It is not known precisely on what principle it was decided where this system should prevail and where not; it was a matter very much of geographical accident and mutual compromise. In the larger part of the Presidency, the cauvaly system was in the main a useful and regulated village watch and ward, to which little exception could be taken; but in the southern Tamil districts the oppressive part of the system predominated. Here the heads of the cauvaly races levied individual exactions of all kinds over wide areas, and with little or no regard for a '*quid pro quo*' in the way of protection." Major Blackburne saw this cauvalgar-system working in Pudukkottai in 1808 and recorded² : "No alteration has been made or attempted in the ancient police establishment of the country. It is a strict cavalgar system and under the direction and control of a strong Government appears to be fully adequate to its objects."

¹ Page 187 of Manual of Administration of the Madras Presidency—Volume I (1885).

² Page 832 of *A Manual of the Pudukkottai State* (1940).

The objects which Major Blackburne had in mind must have been rather limited. Though extraordinary, at least one instance may be quoted when British aid was sought by Pudukkottai to maintain law and order in the last century. There was a revolt against the Raja in 1854 when British military aid was given to restore tranquility in the territory. When the Raja sent a letter thanking the Government for this, he was told ¹: "... The Government are now fully aware that it was the Rajah's personal conduct and the support he gave to unworthy favourites and his neglect to show due consideration to the respectable families and dependants, that have led to the disturbance now put down... the Tondaiman is not to expect that British Power and influence will be again used to uphold him or his favourites in practices or conduct which give just offence to the people."

Being surrounded by British Indian districts, which could facilitate easy mobility of offenders from British India to Pudukkottai State or vice versa, a lack of co-ordination among the police forces of Pudukkottai and British India was strongly felt. We find complaints from each side, of intrusion or of making the task of the other more difficult. On 20th August, 1860, Annasamiah, the Sarkil of Pudukkottai, complained to the Political Agent of an outrage of the Tanjore Police at Karambakkudi and adds² "... As I am afraid that further particulars of the scene would probably prove tedious to you, I beg finally to bring to your notice that a considerable number of persons not at all required by the warrant were not only arrested and treated so disgracefully as afore detailed, but 20 of them have at once been carried away, some in fetters and others in custody of peons, without any reference to the police ameen on the spot..." But the Pudukkottai State was not very enthusiastic about any reorganization of the Police force. On 6th December, 1867, G. Lee Morris, Political Agent, enquired of the Sarkil: "... What are in your opinion the objections which exist against having a separate Police force with no other duties to attend to in the Pudukkottai territory?" A reply was sent on 11th pointing out that the suggestion would call for

¹ Darbar Records, Pudukkottai.

² Tamil Nadu Archives Records, Madras.

large expenditure and that "It will be highly advantageous to the State, if the police force were employed and placed on such a footing as they may equally prove useful for revenue purposes¹."

The police force in Pudukkottai came to be organized on the British model in 1875, even before Sashiah Sastri took up the administration. The Superintendent of Police, Trichinopoly District was made the ex-officio Superintendent of the Pudukkottai State. There were 4 Inspectors, 20 Head constables, and 152 Constables in the police force. The strength of the police was however, changed from time to time, though not substantially. In spite of the common supervision by the British officer, the District Magistrate, Tanjore complained on the 8th February, 1881, that the Pudukkottai territory was infested by gangs of Koravars who made raids into his district for the purpose of committing house-breaking and that on their return to the native State they were stated to be sheltered and protected by wealthy Kallars, who no doubt shared a division of the booty. He also complained that the Pudukkottai State police did not aid or co-operate with the Tanjore police. This letter was referred to the Superintendent of Police of Pudukkottai, who replied on 8th April, 1881². "... The police of the Poodookottah territory were posted to stations, and commenced their work at the end of 1875, after the constables who were entertained had been put through a course of drill at the Trichinopoly Headquarters. The force then consisted of a number of the old police peons of this territory and men who could be got together from time to time. Head Constables were taken on trial without any previous experience or special qualifications. Two of the original Inspectors were untrained men and one an European, was taken from the grade of Head Constable in the Trichinopoly Police, all these Inspectors on trial proved to be utter failures. The services of two of them were dispensed with and one was convicted. A great number of Head Constables were found to be untrust worthy and incompetent and the constables were a most unsatisfactory lot. It was, therefore, found to be unsafe and inexpedient to introduce measures which would place power in their hands, which they would undoubtedly abuse. As time went

¹ Darbar Records, Pudukkottai.

² *Ibid.*

on, the force was weeded of its worst members of all grades and at the present time there are very few of the men left in the force who joined at the commencement. Every effort has been made to instruct Head Constables and constables and introduce by degree reforms and assimilate the working of this police force with that of Madras Police".

Though Sashiah Sastri reported in this connexion that he was taking steps "for organizing a village magistracy and police" it does not seem to have materialised. But the following are the important changes on the Police organization that took place in his times.

(i) A school of instruction for police recruits and reserves was opened in 1880¹.

(ii) As considerable distances intervened between stations and the high roads to Trichinopoly and Tanjore, the road patrol system was not effective. Three intermediate stations were therefore, established².

(iii) On 14th November, 1879, Sahiah Sastri wrote to the Political Agent for the sanction of small reserve force at the Headquarters, at an annual cost of Rs. 1,265. The proposals were approved³.

(iv) The system of admitting police as inpatients in the Government Hospital was introduced⁴.

(v) The system of registering suspects and known depredators was introduced. Arrangements were made with Tanjore, Madurai, and Trichinopoly districts to have information given of all Pudukkottai subjects convicted in these districts for registration with a view to their being watched by the police⁵.

(vi) A system of black marks replaced petty fines, which proved to be without sufficiently deterrent effect on misconduct (of police staff)⁶.

¹ Darbar Records, Pudukkottai.

² Paragraph 136 of the report on the Administration of Pudukkottai, 1880-81.

³ Darbar records, Pudukkottai.

⁴ Paragraph 134 of the Report on the Administration of Pudukkottai 1880-81.

⁵ Paragraph 133: *ibid*.

⁶ Paragraph 64, *ibid*: 1888-89.

Substantiating his proposals for increasing the strength of the police force in Pudukkottai, in excess of the proportion to the population maintained in the adjoining districts, the Superintendent of Police wrote in 1887¹.... As it is, this territory which forms the centre of Kallar population is infested with all classes of bad characters, who, it has been found by experience, availing themselves of the facility, which its position affords them, for the commission of crimes, make inroads into the British districts also. The police of the State are, therefore, burdened with the prevention of such inroads as much as they have to prevent and detect crimes committed within their own limits by the bad characters both of the State and of the surrounding British districts”.

The employment of a common officer for supervision and imitation of a British model soon brought about the desired effects. The police forces of the Pudukkottai State and of British India became concerted and functioned in perfect co-operation and understanding till the last. The remarks of the Superintendent of Police, Tiruchirappalli, in his report to the Inspector-General of Police, in connexion with the rail robbery that occurred on the 28th September 1891, about 2½ miles to the east of Tiruvarambur Station, are worth-mentioning here. He wrote²: “The joint Magistrate of Pudukkottai and Taluk Magistrate of Keeranur have displayed much energy and good will and rendered material assistance. If this hearty co-operation on their part is sustained, as I have every reason to believe it will be, there seems every hope, Inspector Subbaroya Mudaliar will bring the case to detection”.

Jails.—As regards prisons in Tamil Nadu in the early days, N. Subramanian observes³ “Prisons were a part of the judicial administration in the Sangam age. The prison was called *Sirai* or *Siraikkottam*. There were prisons to accommodate ordinary criminals as well as prisons to hold defeated captive kings... The practice of keeping prisoners in chains, therefore, seems to

¹ Darbar Records, Pudukkottai.

² Tamil Nadu Archives Records, Madras.

³ Page 195-196 of *Sangam Polity*, (1966).

have been common. General amnesty for all prisoners was ordered by the king on special occasions. The birth day of the king was usually such an occasion..” But, the statement of the British is: “The native Governments did not hand over any jails to the English and their provision has everywhere devolved upon the British Government. The history of jail management is consequently in a very large measure the history of progressive reforms..”

It was again Sashiah Sastri who gave an impetus in improving the jail administration in Pudukkottai. His approach was both sympathetic and efficient. The health of the convicts was looked after. The convicts were employed chiefly on the conservancy of the town and on the upkeep of the roads therein. Some were employed on palace gardens and at the palaces themselves occasionally, for keeping the premises clear. Women convicts were employed in in-door labour such as rice-pounding and Sweeping. The construction of a new building for the jail, which was commenced in October, 1887, was completed in September, 1889, at a cost of Rs. 57,145. The convicts were removed to the new building on 10th September 1889.*

Administration of Justice Before the Merger.—One can hardly find any difference in the process of administration of justice in Pudukkottai from that of British India. The legal frame work was more or less the same. The constitution of the courts and the procedures and even conventions followed by them were on the British model. The police was under common supervision. Basic principles of jail administration were the same. In addition to all these, the political thinking of the Raja or Darbar officials did not conflict with that of the British Government.

Courts.—In 1910–11 there were 18 Magistrates in the Pudukkottai State for the administration of criminal justice, as detailed below :—

(i) Chief Magistrate	.. .. .	1
(ii) Special Assistant I Class Magistrate	.. ..	1

* Page 177 of *Manual of Administration of the Madras Presidency*, Vol. I, (1885).

* Paragraph 107 of the *Report on the Administration of Pudukkottai 1889–90*.

(iii) Special I Class Magistrate	1
(iv) Assistant II Class Magistrate	1
(v) II Class Magistrate at Alangudi	1
(vi) Stationery II Class Magistrate at Alangudi, Tirumayam and Kulattur.. .. .	3
(vii) III Class Magistrates at Pudukkottai, Kulattur and Tirumayam	3
(viii) Sub-Registrars and III Class Magistrates at Karambakkudi, Perungalur, Viralimalai, Annavasal, Ponnamaravati, Kilanilai and Arimalam	7 ¹
	<hr/> 18 <hr/>

Thus the administration of civil and criminal justice and constitution of the various courts were on the British Indian model quickly absorbing the changes made by the British Government then and there. The Chief Court exercised the powers of a High Court both in criminal and civil jurisdiction, except that in civil cases, a second appeal on points of law was permitted to a special court of second appeal with two Judges sitting annually for about a month. The original jurisdiction of the Chief Court extended over regular suits of all values and its small cause jurisdiction over suits of and below Rs. 200 in value. The rural Sub-Registrars exercised the powers of small cause judges over suits of and below Rs. 50 in value.


The Chief Court was reconstituted with effect from 4th January, 1926. The number of Judges was increased from three to five and an Independent court of first appeals presided over by two of them was organized, "agreeably to the wishes of the public voiced in the Representative Assembly and Legislative Council". The original civil work was distributed among the remaining three judges and sessions work was entrusted to one of them, as it was considered desirable that in the interests of the administration of criminal justice a single judge should preside over the sessions and criminal work continuously for sometime.

¹ Subsequently, their number became 9.

Subordinate to the Chief Court in its criminal jurisdiction, there was a Chief Magistrate exercising control over all the Magistrates. The post of Additional Chief Magistrates, who carried on the duties of the Chief Magistrate, was made permanent in 1925-26¹.

From January, 1944, the small cause jurisdiction of the Chief Court was extended to suits not exceeding Rs. 500 in value. With effect from the same date, the small cause jurisdiction of the Registrar, Chief Court, was also raised from Rs. 100 to Rs. 200. Besides the Chief Court, and the Rural Small-Cause Courts, there were nine village courts, which tried suits of a money value, not exceeding Rs. 30, and with the consent of the affected parties suits in which the value of the subject-matter did not exceed Rs. 100².

The following are the figures relating to the number of persons convicted, acquitted and discharged in some of the years, before merger.



Year.					Number of persons convicted.	Number of persons acquitted and discharged
(1)					(2)	(3)
1899-1900	..	..	..	..	1911	1761
1900-01	..	..	..	..	1780	1700
1905-06	..	..	..	..	2042	2828
1910-11	..	..	..	..	2591	4466
1915-16	..	..	..	..	2765	1851
1920-21	..	..	..	..	3306	1982
1930-31	..	..	..	..	6155	2878
1935-36	..	..	..	..	3070	2288
1940-41	..	..	..	..	5240	2005
1945-46	..	..	..	..	5736	2297
1946-47	..	..	..	..	4098	2479

¹ Report on the Administration of Pudukkottai 1925-26.

² *Ibid.* 1945-46.

Police.—The work of guarding the three sub-treasuries devolved on the police department in 1904-05.

In the beginning of this century, the performance and the service conditions of the Pudukkottai State police, do not seem to have been very good. In respect of the year 1905-06, the Darbar observes¹: "There seems to be a dearth of detective talent in the State police and year after year it has been the painful duty of the Darbar to draw attention to the low percentage of detection and unsatisfactory proportion of property recovered to the property lost".

By way of explaining the large number of vacancies in the police establishment during 1906-07, the Darbar says²: "The vacancies in the constable's grade are reported to be due to several people having resigned their appointments in the State service to join the police force in the neighbouring British districts where pay and prospects are more attractive....The Darbar hopes to meet this difficulty by giving effect to the re-organisation scheme at an early date". The re-organisation was made in 1907-08.

The finger-impressions of 51 convicts undergoing imprisonment in Pudukkottai Central Jails were forwarded to the criminal Identification Bureau attached to the Chief Office, Madras in 1906-07.

The lack of co-operation from the public was a major problem of the police. In its report for the year 1911-12, the Darbar said: "...but no great improvement can be expected in its detection so long as the public are apathetic or hostile towards the police work. Efforts have been made to enlist their more active sympathies on the side of law and order but in many parts of the State there is still a lamentable want of public spirit. The Nattukkottai Chetty country, for example is still the happy hunting ground of criminals, for not only is the booty to be got richer, but the detection and punishment of offenders is more difficult owing to the inveterate habit of the trading community to hush up crime and

¹ Report on the Administration of Pudukkottai 1905-06.

² *Ibid.* 1906-07.

accept almost any loss by theft or robbery rather than run the risk of endangering their business interests during the tedious course of investigation and trial".

Another evidence of the co-operation between the police force of the State and of the British India is that A. G. Krishnaswami Aiyar, the Deputy Superintendent of Police¹, Pudukkottai, received from the Government the decoration of Rao Saheb in 1916-17 mainly for the whole-hearted way in which he had cooperated with the British police.

Preliminary arrangements were made to apply the Criminal Tribes Act to some 'criminal' communities in 1918-19. The Koravars of Arimalam and Kallars of the Kulattur taluk came under this category. An intelligence branch was also opened during this year.

23rd November, 1925 is very important, for it was on this day that a residential school for the reclamation of the boys of the criminal tribes was opened at Tirumayam. To begin with, there were 23 boys. The pupils were taught three 'R's and personal hygiene and health, and also, weaving.

The Superintendent of Police, Tiruchirappalli continued to be the ex-officio Superintendent of the State Police till 1st January 1928, when the system was changed. Both the places of the Superintendent and Deputy Superintendent of the State Police were abolished. A single post of the Commissioner of Police was created. The officer was given all the powers till then exercised by the Superintendent and Deputy Superintendent, with few reservations. He was also made the commander of military force, which consisted of 110 infantry including the commandant and 19 cavalry. Later on, we see that the Superintendent of Police Tiruchirappalli was functioning as the inspecting and advising officer of the State's military and police forces.

¹ The chief 'native' officer of the State Police was the Chief Inspector of Police till 1907-08, when the designation of this post was changed to 'Deputy Superintendent'. A.G. Krishnaswamy Aiyar who was already Chief Inspector of Police became the first Deputy Superintendent of Police, Pudukkottai. He retired from this post on 6-11-1919. But in 1921-22, he was recalled to hold the post and he acted in this post till 18-4-1924, when he went on privilege leave preparatory to retirement.

In 1936-37, a number of village vigilance committees were formed in the State on the lines of British India. 21 members of such committees earned rewards for rendering assistance to the police during this year.

Signallers were trained in the Reserve Force in 1939-40. The necessary equipment for them was obtained from British India. A practical method of mob-operations was also introduced in the Reserve and the mofussil forces.

The Pudukkottai town station was reorganized in 1940-41 by separating the crime branch from the Law and Order branch. From 1st June 1947, the military force was merged with the Police. The strength of the police force in the State, on 1946-47 was as follows :—

(i) Superintendent of Police	..	..	..	..	1
(ii) Sergeant major	..	..	..	..	1
(iii) Inspectors	..	..	..	..	4
(iv) Sub-Inspectors	..	..	..	..	15
(v) I Grade Sergeant	..	..	..	..	1
(vi) II Grade Sergeant	..	..	..	..	1
(vii) III Grade Sergeant	..	..	..	..	1
(viii) Jamadar	..	..	..	..	1
(ix) Naicks	..	..	..	..	16
(x) Lance Naicks	..	..	..	..	16
(xi) Head Constables	..	..	..	..	54
(xii) Constables	..	..	..	..	380

Jails.—There was a central jail in Pudukkottai and five subsidiary jails (at Alangudi, Tirumayam, Kulattur, Viralimalai and Ponnamaravati) in 1899-1900. The number of subsidiary jails was increased or decreased depending on needs. The Central Jail was under the direct management of the Joint Magistrate and the subsidiary jails were managed by the Sub-Magistrates. In 1911-12, the superintendence of the subsidiary jails was transferred to the Chief Magistrate. Rattan work, basket-making, rope making, binding and carpentry were also done in the Central Jail.

Honorary visitors were appointed in 1919-20 to visit the Jail periodically. The average dieting charge of the prisoners per head (per diem) was as follows :

Year.								Amount.		
								RS.	A.	P.
1904-05	..	..	..	..	..	..	..	0	1	9
1905-06	..	..	..	..	..	..	..	0	1	9
1910-11	..	..	..	..	..	..	..	0	1	10
1915-16	..	..	..	..	..	..	..	0	2	5
1920-21	..	..	..	..	..	..	..	0	3	5
1925-26	..	..	..	..	..	..	..	0	3	1
1929-30	..	..	..	..	..	..	..	0	3	3
1935-36	..	..	..	..	..	..	..	0	2	2
1940-41	..	..	..	..	..	..	..	0	2	2
1945-46	..	..	..	..	..	..	..	0	5	0
1946-47	..	..	..	..	..	..	..	0	5	10

Administration of Justice after the Merger: Legislation.— V. N. Kudva then first member of the Board of Revenue, reported after the merger¹ : “...The laws that are now in force in the State are practically the same as those in the Indian Union. There are, however, no death sentences. The Court fees are on much lower scale and probably less than half of those prevalent in our Province. I discussed the legal position as regards future administration with the Chief Judge and the State Vakil who seems to be a learned lawyer. They pointed out to me that under Act XLVII of 47, the Government of India may pass such orders as they may deem fit for effectitvely exercising extra-provincial jurisdiction outside the Union by a notification in their Gazette : the Government of India may determine that any of the laws or procedure which are in force in any Province may be applicable, with or without modification, to this territory, and they can determine the courts and judges and pass orders to regulate their jurisdiction. If, on examination, this position is found to be correct, the Government of India may be addressed at once to issue such a notification and to delegate their powers if possible to the Madras Government”.

Accordingly the Government of India delegated to the Madras Government their extra-provincial jurisdiction in Pudukkottai State. A notification issued by the Government of India for this read¹: "Whereas the Central Government has full and exclusive extra-provincial jurisdiction for and in relation to the Governance of the States of Banganapalle and Pudukkottah. Now, therefore in the exercise of the powers conferred by sub-section (2) of Section (3) of the Extra-provincial Jurisdiction Act, 1947. (XLVII of 1947) and of all other powers enabling it in this behalf, and in supersession of the notifications of the Government of India in the Ministry of State, number 151-1B, dated 25th February 1948, the Central Government is pleased to delegate to the Provincial Government of Madras, the Extra-provincial Jurisdiction aforesaid, including the power conferred by Section 4 of the said Act, to make orders for the exercise of that jurisdiction: Provided that (i) the exercise of the jurisdiction hereby delegated shall be subject to the control of the Central Government and (ii) the delegation shall not preclude the Central Government from exercising the jurisdiction hereby delegated."

With the strength of this delegation, the minor differences in the legal framework were removed. Prohibition was extended. The levy of income-tax was introduced. This legal transition was carried on with due regard to the principles of natural justice and without violating any right, title or prescription which had been guaranteed to the citizens by the laws that were in force before merger. Thus Pudukkottai became an integral part of India and subject to its constitution and enactments.

Courts.—After merger, in consultation with the District and Sessions Judge of Tiruchirappalli (P. Ramalingam, I.C.S.), Kudva reported that the then existing arrangement was said to have been working satisfactorily. As an interim measure the existing courts functioned for some time. Then, the Chief Court was merged and a court in the rank of Subordinate Judge's court and two civil courts, i.e., the Principal and Additional District Munsif's Courts were formed. They worked under the control of the District Judge, Tiruchirappalli.

¹ 'The Hindu' dated 7th April 1948 (page 8.)

An Additional First Class Magistrate's Court at Pudukkottai, four Second Class Magistrate's Courts (called as Stationary Sub-Magistrates' Courts) at Alangudi, Pudukkottai, Keeranur and Tirumayam, which were presided over by the Stipendary Magistrates, and a Bench Court at Pudukkottai with Honorary Magistrates (exercising III Class powers) were formed. These courts were under the control of the Collector of Tiruchirappalli district.

The Judiciary was separated from the Executive with effect from 1st January 1955. The Magistrates were brought under the supervision of the Judicial District Magistrates, who were under the direct control of the High Court of Judicature, Madras. The Additional First Class Magistrate's Court was upgraded to that of the Sub-Divisional Magistrate's Court at Pudukkottai. The stationary Sub-Magistrate's Court at Alangudi was abolished and its jurisdiction was merged with that of the Sub-Magistrate (Judicial), Pudukkottai. Other Stationary Sub-Magistrates' Courts called as Judicial Sub-Magistrates' Courts were under the control of the Sub-Divisional Magistrate (Judicial), Pudukkottai. Appeals from the judgments of the Second Class Magistrates were heard by the Sub-Divisional Magistrate, and appeals from the judgments of the Sub-Divisional Magistrate were heard by the Sessions Judge, Tiruchirappalli.

The Bench Court, Pudukkottai was also reorganized and invested with III Class powers. It came to be presided over by seven Honorary Bench Magistrates, selected by the Collector, Tiruchirappalli and appointed by the Government of Tamil Nadu. The Sub-Magistrate (Judicial) was the ex-officio president of the Bench Court whose jurisdiction was the municipal area of Pudukkottai.

On the civil side, the appeals from the judgments of both the Principal and Additional District Munsifs, having jurisdiction over the entire Pudukkottai division were heard by the Subordinate Judge, Pudukkottai. The next appeal lay before the District Judge Tiruchirappalli.

Police.—After merger, Pudukkottai was made a Police Sub-division, under a Deputy Superintendent of Police in Tiruchirappalli

district. There were two circles, Pudukkottai and Tirumayam. The details of the Police stations and out-posts were as follows :—

PUDUKKOTTAI CIRCLE.

<i>Police Station.</i>	<i>Out-posts.</i>
1 Pudukkottai	
2 Tirugokarnam	Vellanur.
3 Alangudi	Adanakkottai.
4 Karamakkudi	Malayur

TIRUMAYAM CIRCLE.

<i>Police Station.</i>	<i>Out- post.</i>
1 Tirumayam	Namanasamudram.
2 Ponnamaravati .. ..	....
3 Panayappatti .. ..	....
4 Karaiyur .. ..	....
5 Arimalam .. ..	....
6 K. Puduppatti	Embal.

Jails.—The jail administration was also suitably revised on the lines of the Madras Province. There were only three sub-jails, one each at Pudukkottai, Keeranur and Tirumayam. A Borstal School was also started at Pudukkottai in 1968, in the place of the District jail.

In Pudukkottai District.—After Pudukkottai was formed into a district, some changes have been made in the organizational pattern of the courts and police, to suit the new status of the area.

Courts.—The permanent Subordinate Judge's Court at Pudukkottai was abolished and a new District and Sessions Court has been constituted at Pudukkottai. The Sub-Divisional Magistrate's Court was also upgraded into that of District Magistrate's Court (Judicial). The new District and Sessions Court and the District Magistrate's Court (Judicial) from 14th January 1974 were inaugurated by the Hon'ble Justice K. Veeraswami B.A., B.L., Chief Justice of Tamil Nadu. A new District Munisif

Court was also constituted at Arantangi. The Sub-Magistrate's Court (Judicial), Arantangi was also included in the Pudukkottai district.

Now, the jurisdictions of the courts are as follows :—

Civil.

District Court, Pudukkottai .. Jurisdictions of the Courts of the District Munsifs, Arantangi and Pudukkottai (*i.e.*, entire Pudukkottai district).

District Munsif's Court, Arantangi. Arantangi taluk including Avadayarkovil sub-taluk.

District Munsif's Court, Pudukkottai. Pudukkottai revenue division.

Criminal.

District Magistrate's Court (Judicial), Pudukkottai. Pudukkottai district.

Sub-Magistrate's Court, Arantangi. Areas comprising Arantangi, Avadayarkovil, Manameli-kudi and Mimisal police stations.

Sub-Magistrate's Court (Judicial), Keeranur. Areas comprising Keeranur, Annavasal, Iluppur, Udayalipatti and Viralimalai police stations.

Sub-Magistrate's Court (Judicial), Pudukkottai. Areas comprising Pudukkottai, Tirugokarnam, Alangudi, Karambarkudi and Gandharvakkottai police stations.

Sub-Magistrate's Court (Judicial), Tirumayam. Areas comprising Tirumayam, Ponnamaravati, Panayappatti, Arimalam, Karaiyur and K. Puduppatti police stations.

Bench Court, Pudukkottai .. Municipal limit of Pudukkottai town.

The territorial jurisdiction of the District Munsif's Court, Pudukkottai and the Sub-Magistrate's Court (Judicial), Pudukkottai were enlarged by the inclusion of some of the areas from Thanjavur district.

With the introduction of the new Criminal Procedure Code, 1973 (Act II of 1974) from 1st April 1974, the Bench Court has been abolished. Under this code, the nomenclature of the District Magistrate (Judicial), Pudukkottai has been altered as the Chief Judicial Magistrate, Pudukkottai. Similarly, the Sub-Magistrates (Judicial) are also known as the Judicial Second Class Magistrates.

Appeals from the criminal judgements of the Chief Judicial Magistrates, Pudukkottai and from the civil judgments of the Principal and Additional District Munsif's, Pudukkottai and of the District Munsif, Arantangi are heard by the District and Sessions Judge, Pudukkottai. The District and Sessions Judge, Pudukkottai has also been vested with powers to function as Inam Abolition Tribunal, Employees' State Insurance Tribunal, Appellate authority under lease and Rent Control Act (Act XVIII of 1960), Estates Abolition Tribunal, Arbitrator under Madras Requisition and Acquisition of immovable properties, Revisional authority under the Madras Public Trust Regulation and Administration of Agricultural Lands Act, Tribunal under section 95 of the Co-operative Societies Act, 1961 and the Special Officer for Electrical undertaking (Acquisition) Act, 1954.

Appeals from the judgment of the Judicial Second Class Magistrates in the district are heard by the Chief Judicial Magistrate, Pudukkottai. They are, however, routed through the Sessions Court before admission.

A standing Bar Association consisting of 53 members is also situated at Pudukkottai and a bar with about 20 members is there at Arantangi.¹

¹ Report from the District Judge, Pudukkottai, for the Pudukkottai, District Gazetteer.

Police.—After Pudukkottai became a district, it has been brought under the direct control of a Superintendent of Police. It forms part of the Central Range which has its headquarters at Tiruchirappalli. There are now two police sub-divisions, Pudukkottai and Arantangi, each under the control of a Deputy Superintendent of Police. The organizational details of the present police force in the district are as follows :—

Pudukkottai. Arantangi.

The strength of each division—

Deputy Superintendent of Police.	1	1
Inspectors	2	4
Deputy Inspectors	1	1
Sub-Inspectors	9	13
Reserve Sub-Inspectors	1	..
Additional Sub-Inspectors	4	4
Head Constables	19	22
Grade I, Police Constables	30	39
Grade II, Police Constables	176	181
Total	<u>243</u>	<u>265</u>

Under the Deputy Superintendents of Police, the Circle Inspectors are in charge of units and units like District Intelligence Bureau, District Crime Branch, Special Branch are under the direct control of the Superintendent of Police. The Deputy Inspectors provide general assistance to the Circle Inspectors. The Sub-Inspectors are in charge of the police stations.

The following Reserve force is also available in the Pudukkottai district :—

Reserve Inspectors	..	..	..	..	..	1
Reserve Sub-Inspectors	..	..	..	..	..	3
Reserve Assitant Sub- Inspectors.	..	..	..	..	..	3
Head Constables	..	..	..	..	..	13
Naicks	..	..	..	..	..	12
Lance Naicks	..	..	..	..	..	12
Grade II Police Constables						156
Total ..						<u>200</u>

After the formation of the Pudukkottai district the following wings have been sanctioned for this district :—

- 1 Radio Station (Wireless).
- 2 Single Digit Finger Print Section.
- 3 Photograph Section and Mobile Forensic Science Laboratory.
- 4 Very High Frequency Sets. 5. Control Room. 6. District Intelligence Bureau.

The Pudukkottai Control Room operating on a Very High Frequency connected with the district repeater in district headquarters and also to J.55 Kodaikkanal can connect 2/3 rd of the stations in the district on wireless. There is always a vehicle on the move all the twenty-four hours inside Pudukkottai Town and during emergencies the stations can always contact the Control Room. After the functioning of the Control Room calls from the Public have been attended to with promptness. Thus the police efficiency in responding to the needs of the public has been increased to a very great extent. The District intelligence Bureau is acting as a store house of information and, ably supported by police Computer Wing, Madras, has been giving advisory memos to locate property offences. The photographic section and the Mobile Forensic Science Laboratory assisted by the Single Digit Finger print section rush up to the scenes of occurrence within 15

shortest possible time and help giving clues for identification of criminals. There is also a proposal to have separate Central Crime Station in the heart of the town to attend to only property crimes. Though these facilities are there in the State for the past 4 years, these have been sanctioned to Pudukkottai only recently and they are very useful for improving the detection of crimes more efficiently.

The Maintenance of Order :

General.—The law is an expression of the will of the people, as shaped by their Government. Even before the systematic codification of law, there existed a vast mass of customs, usages, traditions and conventions for the regulation of social life. They are there even now but adherence to them is not enforced by the State. Hence 'law' is understood in a narrower sense. Even before well-defined law emerged, 'order' was there. It is only to Perpetuate the order, law was framed. It grows and changes to suit the needs of the people. When social life becomes more and more complex, the adjustments which are found necessary for overall development, are examined in detail and passed on to the statute-book and implemented with the sanction and force of the State. To facilitate this implementation of the much-needed adjustments, methods for control and punishment are devised. As such the main purpose of the law is the best social order, in which each citizen can share equally the advantages of the social life.

In the early days, the self-made unwritten rules of the communities, with the sanctity of ethical and religious principles, did the role of the modern law. This hold was effective enough and with the threat of ostracism by the community, individuals were forced to adopt reasonable behaviour. The emergence and growth of the institution of king, provided a special agency to maintain the social order and internal security. This function became one of the stipulated duties of the sovereign. Though there was no defined process of legislation, the views expressed in the books of religion and general knowledge were taken as guidelines for administration.

The advice of the learned men and priests was used to limit the capricious decisions of the kings. This check was strong or weak—depending on the personality of the king. As the communities had in themselves a system of maintaining a social order and as the cases that came up before the kings were few, the social order was not unduly disrupted.

When sovereignty passed into the hands of the British, the foreign character of the ruling power increased the indispensability of the maintenance of order among people as an aspect of administration. A codification of all the laws in English was taken up urgently to facilitate the administration. The direct role of the people in the maintenance of the order among themselves became insignificant in due course.

On the same subject, Justice V. R. Krishna Iyer, Judge, Supreme Court of India says¹: “Government by the people is not a political methodology; it is a way of life. And so, even in criminal justice administration, the role of the people and how best they can be educated, trained, involved and even para-professionalised, has to be studied. We have over-professionalised investigation, trial and higher stages and punitive processes ignoring the man, the community. At every level—particularly, grass-root level—detection, trial, correctional sentence and prevention of crime should be people-oriented. The frustration and cynicism that our current system breeds can evaporate only by a credible, if gradual association of society at the mass level in the crime punishment operation”.

Some 'Law and Order' Problems in Pudukkottai.—Pudukkottai was a stronghold of rural communities, especially that of the Kallar community. In his *Notes on the Criminal Tribes* (1915) Muhammad Abdul Ghani says: “Although after the annexation of the province of Madura to the Company's territories in 1801, the Kallars changed their habits and submitted to order, yet they took to marauding and to making themselves obnoxious by their grave crimes against property. What exasperated the people was their system of black-mail called *Kudikaval*, under which system the

¹ Page 70 of *Indian Journal of Criminology*—Volume 3—No. 2 (July 1975).

Kavalgors (Kallars) of the village received fees and free lands for undertaking to protect the property of the villagers against theft or to restore an equivalent in value for anything lost. When people did not pay their fees or fell in arrears with their payments the Kavalgars, began to lift cattle and to set fire to houses".

So the social order in Pudukkottai depended on a compromise with the Kallars. Whenever a deviation was made, it resulted in disruption or between the Kallars and other. In a note for the *Pudukkottai District Gazetteer* on the historical background of the Pudukkottai Police, K. Nagarajan one of the senior lawyers¹ at Pudukkottai says: "The Pudukkottai Police as we know it, is just over a hundred years old. Before then, there was no organised police force. An *ad hoc* arrangement of Watch and ward was the only deterrent of crime. Detection of offences was based, on the whole, on a system of blackmail. Dacoities by night and day, former with the aid of torches, highway robberies and burglary occurred almost everywhere and restitution of properties was obtained by the payment of clue money (*tuppu-cooly*) to informants who, for a consideration,—by no means trifling arranged for the stolen properties to be restored to the owners. Information of offences was laid before the village officials but they had little part in preventing offences. When the Pudukkottai police was organised, the Superintendent of Police of Tiruchirappalli district (then Trichinopoly) was in over all charge and he appointed the local staff and that had a salutary effect. Criminals realised that they could no longer play at hide-and-seek or float the authorities and that the arm of the law was long enough to reach them. However it must be confessed that *tuppu-cooly* did not lose its hold, though, in time, it weakened and at long-last disappeared.

There have not been many instances of 'law and order' problems in Pudukkottai excepting of course the frequent cases of theft, highway-robberies, etc., described above. Two major cases however, deserve to be mentioned.

¹ And son of A.G. Krishnaswami Aiyar' Deputy Superintendent of Police under the Darbar.

In February, 1921, a clash at Enadi took place. As regards this incident, the Political Agent reported to the Government on 16th December, 1921¹, . . . The riot was one of a very serious kind, the like which has not been known in the State for many years. It had no political significance, but was due to purely local causes in a very remote part of the State. . . . A large mob, numbering according to some accounts 1,000 men, armed with knives, Spears, country swords, daggers and sticks marched from the vicinity of Tirukkalambur to Enadi, and there attacked a much smaller party of men from Kattayandipatti, mostly Valayars. The fight that followed was very one-sided affair; as far as we have been informed no complaints of injury were reported by the Tirukkalambur party, but of the Valayars one was killed outright and another died on the way to the dispensary at Ponnamaravati; at least twenty were very seriously wounded. . . The causes of the riot are in dispute, but the investigations of the police show that it was due to a quarrel between Kallars of Tirukkalambur and Valayars of Kattayandipatti about the *kaval* of the village of Vendampatti. The old system of blackmail, known as *kaval* by which the Kallars get a more or less dishonest livelihood in Trichinapoly, Madurai and some part of the State, still prevails in the area round Ponnamaravathi. Vendampatti is a Chetti village and the *kaval* was a rather remunerative business, which seems to have been formerly done by the Kallars of Tirukkalambur. The chetties dissatisfied with the frequency with which thefts took place, and the inefficiency of the Kallars in the recovery of stolen property, are said to have given the duty to the Valayars of Kattayandipatti, and it is supposed that this attack by the Kallars was to put such terror into the Valayar that they would surrender the *kaval*. . . .”.

Another major law and order problem faced by the Pudukkottai Police before merger, was the riot that took place in the town on 15th July 1931. The immediate cause of the riot was reported to be an upward revision of the municipal tax.

This incident took the police and officials by total surprise. The riot resulted in the burning of the Official Receiver's Office. A mob broke open the jail and let the prisoners loose.

¹ National Archives Records, New Delhi.

The weaving-shed inside the jail was set fire to and the safe in the office room broken open and looted. Books were looted from the Vakil' Association and burned. The Chief Court, Town Police Station, the Inspector's Office and the Police Commissioner's Office were also looted. The bungalow of the President of the Council of Administration. Diwan Bahadur T. Raghaviah, was attacked and damaged. A State car was also burned. The houses of the Town Inspector and the Reserve Sub-Inspector were looted.

A joint note dated 27th July 1931, given by members of the, Council of Administration observed: "..... The immediate cause of the disturbance seems to be the revision of municipal tax. The question of the revision of municipal tax was simple in itself but it affected a large number of rate payers in the town. The Municipal Council is, under the Municipal Regulation, directly responsible for this revision and did actually initiate it. All that the Darbar did was to make the Council adhere to the principle of revision which was obligatory under the Regulation when later the Council sent us a resolution for its postponement"

Help was sought for from the British police, to restore order in the town. A Punjabi regiment was despatched from Tiruchirappalli the next morning at the request of the Agent to the Governor-General Lieut. Colonel H. R. N. Pritchard, the Agent to the Governor-General himself paid a visit to Pudukottai shortly thereafter and took effective steps for bringing the town back to normalcy. Organised lootings at Andakulam and Cannangudi followed the riot in the town, encouraged probably by the ineffectiveness of the State Police.

Following this riot, the services of Mr. Hume, an officer of the Madras Police were obtained for the purpose of reorganizing the State police. As a result of the reorganisation, the strength of the armed reserve was increased by one Sergeant Major, one Head Constable and 10 Constables, so as to provide for the maintenance of an adequate striking force over and above the average number of men generally required for the performance of routine duties.

With these exceptions, the police of Pudukkottai State did not have any occasion to face any major law and problem. In respect of the year 1945—46, it was reported: "At the end of the fasli there was an agitation for Responsible Government and the various meetings were held in the town and mofussils and addressed by speakers mostly from outside, who incited people to breach of peace and contempt of authority. As a result there was a tendency to insubordination and violence mainly among the student population. One redeeming feature of the situation was that the responsible section of the population did not join or lend any support to the movement".

It is, therefore, clear that even in the peak of the independence movement, Pudukkottai did not witness any serious agitations with the result that the maintenance of law and order was not as onerous as it was in many of the British districts.

The Contemporary Scene.—The District Collector plays a decisive role in the maintenance of law and order, in-co-operation with all other departments concerned. As District Magistrate he peruses all reports received from the Special Branch of the Police and sends reports to the Chief Secretary to Government on problems of law and order. Under his control work the Public Prosecutor, and other Government lawyers. They appear on behalf of the Government and defend public interests in the Courts of law. The Collector has also got the power to withdraw police cases pending in criminal courts on a report from the Superintendent of Police in consultation with the Public Prosecutor, if sufficient reasons are there. For immediate prevention of nuisance or apprehended danger, he may take action under section 144 of the Criminal Procedure code. Notification of habitual offenders, premature release of prisoners, etc., are some of the important functions which the Collector discharges in consultation with the Police and jail authorities.

The responsibility of enforcing law and order in the district primarily in the hands of the Police Department. In the changed circumstances, its functions have become more important. The following are some remarks in the *Report of the High Level Team on*

District Administration in Gujarat (1972) which are equally applicable to Tamil Nadu: "The State has switched over from the Police State to the Welfare State with the result that the old method of investigating crimes based on crude interrogation and use of third degree methods have now become obsolete. The primary function of the police administration is to prevent and detect crime, protect life and property and preserve peace and tranquillity. With the increase in population, extension of social service, rapid industrialisation and urbanisation, the functions of the Department have become varied and complete. The district police force is responsible for discharging normal duties of prevention and investigation of crimes. With the enforcement of socio-economic policies of Government such as the prohibition law, anti-bigamy law, untouchability abolition law, etc., the work-load of the police has increased tremendously. With the development of a net-work of roads and communications, the traffic problems have also loomed large in the police administration".

The responsibilities of the Police in booking the offences, conducting investigation and also assisting the prosecution are very important in the maintenance of law and order.

The number of cognizable offences reported to the police in Pudukkottai district in 1972, 1973 and 1974 are given below:—

	(1)	Number of offences reported during.		
		1972.	1973.	1974.
	(2)	(3)	(4)	
1. Total Cognizable Crimes (Indian Penal Code Cases).	621	791	936	
2. Rioting (117-I49)	47	57	99	
3. Offences relating to coins (231-254).	..	..	..
4. Offences relating to currency and Bank notes (489-A to 489-D).	..	..	2	
5. Murder (302-305)	13	13	19	
6. Culpable homicide not amounting to murder (304-308).	16	15	..	

(1)	Number of offences reported during		
	1972, (2)	1973. (3)	1974. (4)
7. Administering stupefying drug (328). ..	..	..	1
8 Kidnapping and abduction (363, 367, 371 and 373).	3	1	13
9. Dacoity and preparation and assembly for dacoity (395-398).	1	1	..
10. Robbery (392-394, 397 398) ..	4	..	1
11. House-breaking (449, 452, 45,4455 457, 460).	88	141	153
12. Cheating (419-420) ..	4	5	12
13. Breach of trust (496-409) ..	19	14	15
14. Thefts (379-382) ..	195	253	226
(a) Copper wire ..	..	1	9
(b) Cattle ..	21	41	24
(c) Cycle ..	33	46	52
(d) Motor Vehicle accessories ..	..	5	..
(e) Fire Arms ..	..	..	..
(f) Explosives ..	..	..	..
(g) Othe-types ..	141	161	135
15. Others ..	191	248	421

The number of cases both civil and criminal filed and disposed of in Pudukkottai district during 1974-1975 are as follows:

CIVIL.

List of Cases.	District and Sessions Court, Pudukkottai.		District Munsif's Court, Pudukkottai.		District Munsif's Court, Aratang.	
	Filed.	Disposed of.	Filed.	Disposed of.	Filed.	Disposed of.
Original Suits	(2)	(3)	(4)	(5)	(6)	(7)
Appeal Suits	118	77	1,272	1,559	458	472
Small Cause Suits	163	68	..	..	..	..
Civil Miscellaneous Appeals	..	..	1,074	1,131	296	281
Inam Abolition Tribunal C.M.As.	74	377	..	..	..	..
Land Tribunal C.M.A's	112	32	..	..	..	..
Co-Operative Society C.M.As.	10	89	..	..	..	..
Land Acquisition Original petitions	16	2	..	..	..	..
Motor Accidents Claims Tribunal Original petitions.	19	10	..	..	..	..
Employees State Insurance Original petition	25	14	..	..	..	..
Civil Revision petitions	2	..	..	..	..	..
Insolvency petitions	7	5	..	..	..	..
H.R.C.O. P's.	31	7	1	3	1	1
Executions petitions	..	..	94	96	..	..
Original petitions	100	99	1,421	1,810	434	501
Estate Abolitions Original petitions	72	59	20	17	..	..
	1	..	..	..	..	..

CRIMINAL.

<i>I et al. v. Cases.</i>	District and Sessions Court, Pudukkottai.		Chief Judicial Magistrate's Court, Pudukkottai.		Judicial II Class Magistrate's Court, Pudukkottai.		Judicial II Class Magistrate's Court, Keeranur.		Judicial II Class Magistrate's Court, Tirunayam.		Judicial II Class Magistrate's Court, Arantangi.	
	Filed.	Disposed of.	Filed.	Disposed of.	Filed.	Disposed of.	Filed.	Disposed of.	Filed.	Disposed of.	Filed.	Disposed of.
(1).	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Sessions Cases ..	44	38	..	..	..	..	..	..	..	..	..	..
Criminal Appeals .	164	176	..	..	..	..	..	..	..	..	..	..
Criminal Revision Petitions.	7	10	..	..	..	..	..	..	..	..	..	..
Criminal Miscellaneous petitions.	407	409	..	..	..	..	..	..	..	..	..	..
Other Criminal petition ..	..	..	710	609	3,985	3,460	1,095	899	1,963	1,830	2,929	1,722

There are four sub-jails in the Pudukkottai district at Pudukkottai, Keeranur, Tirumayam and Arantangi. The Deputy Tahsildars of the Revenue Department are incharge of the sub-jails at Keeranur, Tirumayam and Arantangi. There is a Borstal School at Pudukkottai. The Superintendent of the Borstal School is incharge of the sub-jail also.

The accommodation of the sub-jails is as follows :—

Sub-jail, Pudukkottai	..	..	..	30
Sub-jail, Keeranur	..	..	..	8
Sub-jail, Tirumayam	..	..	..	14
Sub-jail, Arantangi	..		..	28

P. Paramaguru, Inspector-General of Prisons, writes ¹ "One day the great sculptor Michelangelo stood gazing at a crude marble rock for hours together. One of his assistants after patiently waiting for long ventured to ask, "Sir, there is a crude and rough rock before us. What is there to see it?" Michelangelo replied, "You only see the rough exterior of the rock, but I see a beautiful angel and I am planning how to shape it so". Here Michelangelo has suggested what is expected of a correctional service officer. With all our limitations, we are endeavouring our best to remove the roughness and the crudeness of the criminal entrusted to our care and bring out the angel in him. No man is a born criminal. A slip in the walk of life on the wrong side can bring anybody inside the prison. It is for us to treat him in a proper way so as to make him fit for society and turn into a good citizen".

The Borstal School, Pudukkottai, which is intended for the detention of offenders in the age-group of 18 to 23 years of age, admission being between 18 to 21 years, seeks to achieve this object of correctional internment. One sub-jail with separate accommodation for female prisoners is attached to Borstal School. Adolescent prisoners between the age-group of 21 to 25 are also admitted in this school from all over the State in a separate block called Dormitory Block. The authorised accommodation of the Borstal School is 205, that of Dormitory Block is 200 and that of the sub-jail is 30. There is a Welfare Officer in this school, who attends to all aspects of welfare of the prisoners, such as arranging

¹Indian Journal of Criminology, Vol. 3, No. 2, July 1975.

interviews with their relatives, settling family disputes, etc. Crafts like Carpentry, Tailoring, Blacksmithy and Binding engage attention of the inmates. Attention is also paid to the rehabilitation of the released inmates.



सत्यमेव जयते

CHAPTER XIII—OTHER DEPARTMENTS.

Government touches the life of people in diverse fields today. There is, among others, the work of rehabilitating in Tamil Nadu families of Indians returning from Sri Lanka, the organization of co-operative institutions ; the arrangements for agricultural engineering ; the setting up and maintenance of public works ; the regulation of land transfers ; the administration of religious and charitable endowments ; procurement and distribution of civil supplies ; the building of houses for the rural poor. The Governmental 'umbrella' covers district life in all its diversity.

Rehabilitation—

Emigration.—Ceylon is not the only country to which labour from Tamil Nadu has migrated. Uncertainties of agriculture, very often aggravated by the vagaries of monsoon, and a stunted industry have, forced the labour force here to think in terms of running away from home—however dear—to seek a livelihood. When men had to endure acute poverty helplessly, when they could do nothing to alleviate the sufferings of their ailing parents or hunger-stricken wives and children and when they could not get any help from Government or society for survival, homeland meant nothing ; a hope of earning something was sufficient to induce many labourers of our country to swarm towards the emigrating agencies. Capitalistic interests in several corners of the world provided an irresistible temptation to this country's labour-force, which had become, due to the pressure of circumstances, available very cheap. Labourers, sometimes with their families, were always available to be taken where they could hope to survive. This force increased or decreased depending on the depression in the motherland. The uncared-for labour force from India flew out of necessity not only to Ceylon

but also to countries like Malaya, Burma, Jamaica, Fiji, British Guiana and Trinidad. But Ceylon, due to its nearness and historical connections, was the favourite harbour.

Though it is very difficult either to prove or disprove the Lemurian theory¹ which holds that not only India and Ceylon but also New Zealand, Australia, Malaya and the neighbouring islands together constituted one land-mass, there is a concurrence of opinion on the existence of political and cultural intercourse, particularly between South India and Ceylon from the ancient times. Geological and geographical similarities apart, evidence of an active association among the people of peninsular India and pear-shaped Ceylon from the early times, is abundant. Starting from legends and epopees, with the movement of times, this evidence becomes more and more crystalline. Dr. K. K. Pillay says¹ "...the migration of people from South India to Jaffna began very early and continued intermittently for a long time. There is a great possibility that even before Vijaya's advent into Ceylon, Tamils from South

¹ Dr. K. K. Pillay writes regarding the Lemurian theory: There is a theory that, extending to the east, south and west of Kanyakumari there lay in the past a vast stretch of land called by some as 'Lemuria'. The name was derived from the word employed to denote the monkey-like animals known as Lemur which abounded in that region. This so-called Lemurian continent is supposed to have been a huge mass of territory connecting South India with Ceylon, Malaya, Indonesia and the distant Australia on the one hand and Madagascar and South Africa on the other. It was believed that a large part of Lemuria was devoured by the sea. Apart from geologists and geographers who uphold the theory, several scholars support it by ascribing a grand antiquity to the Tamil Sangam, the first of which was said to have been located in Ten Madurai far out in the sea and the second in Kapadapuram a little farther away from Kanyakumari. The third sangam is said to have been established in what is present Madurai.

But the literary support for this view is not strong. The earliest mention of the three Sangams and of the land beyond of the present South India occurs in Nakkirar's commentary to the Irayanar Ahapporul. This commentary is not assignable to a period earlier than the 9th century A.D. Later commentators like Adiyarkunallar and Nachinarkiniyar developed this view more elaborately. The incredible antiquity claimed for the first sangam and the divine element imported into its origin and composition run against the acceptability of the account.

However, the known fact regarding floods near South India in 'aer periods and the mention of Kapadapuram in Ramayana and Mahabharata indicate that there lay some land beyond Kanyakumari and that an earlier Tamil Sangam was located there. Though in the present state of our knowledge the full-fledged Lemurian theory or its equivalent the theory of Kumarikaandam cannot be accepted, there is a probability that some land had once stretched beyond Kanyakumari.

India had crossed the narrow sea and settled in Ceylon and particularly in Jaffna. Beginning almost from the time when people of South India had learnt the art of sailing they might have had contact with Ceylon. At the narrowest point, the sea dividing Ceylon from South India is little more than twenty miles in width. South Indians must have gone to Ceylon as peaceful sailors and traders at the outset. It is notable that old (Purana) coins have been discovered at Kanterodai. This suggests that either for the sake of trade or other peaceful pursuits Indians might have settled down in Jaffna at an early date. In course of time some might have migrated and mixed with the Nagas and other earlier inhabitants of north Ceylon".

Deterioration of favourable circumstances at home, coupled with the development of coffee, tea, and rubber plantations abroad, mainly in the other British colonies, gave an impetus to the emigration of labour. Organized institutions were brought into existence for the recruitment and transport of this labour force from India to other countries, with the support of the British Government. To begin with, the foreign estates had their own methods of recruitment. Subsequently, however, concerted efforts were made to arrange emigration of labour from India. The Ceylon Labour Commission came into being in 1904, "with a view to minimise the evils incidental to recruiting, to finance the recruiters, and though it undertakes no direct recruiting to facilitate in every way the influx of agricultural labour to Ceylon." ¹

The exploitation of the helpless labour-population by the plantation owners abroad and their agents in India gradually acquired alarming proportions. In a memorandum² presented to the Committee on the Recruitment of Indian Labour for Ceylon, Karumuthu Thiagaraja³ stated : "The present system of recruiting Indian labour and its management on the estates is based on

¹ The answer given by Mr. C. B. Cochainé, Acting Deputy Commissioner to the Chairman of the Immigrant Labour Committee on February 15, 1918.

² Pp. 40—41 of the Report of the Committee on Recruitment of Indian Labour for Ceylon (1918).

³ Member of Subjects Committee of the Thirty-Second Indian National Congress and Secretary of the Madras Presidency Association, Madura-Ramnad Branch.

fraud and maintained by force. It has caused enormous suffering ; it has broken up families ; it has driven men to crime ; and women to lives of shame ; it has resulted in frightful mortality. It is virtual slavery. " He contended that false hopes and ideas were given to the labourers before recruitment, and that the planters neglected and ill-treated their labourers. He pointed out : " The death-rate, and particularly child mortality, are abnormally high. In 1913, the death rate on a certain estate was 238 per thousand. In 1914, the average for all estates was 42.3 per thousand, while it was only 27.4 per thousand in Colombo. In 1916, the rate of infant mortality on estates varied from 182 to so much as 459 per thousand in some districts, and the general average was 256. The rate in the whole colony was 194 per thousand. When we consider the fact that epidemics on the estates are unknown, these figures are striking, and point conclusively to insanitary conditions of labour and lack of satisfactory medical aid. The planters seem to have the right of private arrest, as if the labourers were actual slaves. They also reserve the right of punishing, fining, caning, etc. and they use it with impunity. They make use of corporal punishment which is sometimes very severe, going so far as to cause grievous hurt and bleeding for such trivial reasons as disobedience, absence from the estates without leave, etc. " Thus was the general condition of the migrated labour from India.

It is an irony of fate that Pudukkottai State, to which the last ruler of Kandy is said to have belonged,¹ should become in course of time an important centre for the emigration of labour to Ceylon.

Evidently due to its more disadvantageous economic background, Pudukkottai's contribution to the emigration of labour was considerably more than the rest of the country's. The so-called ' native ' Government did not take this exit of labour seriously. On the 6th October, 1913, the Political Agent informed the Government of Madras that the Pudukkottai Darbar had informed him that " they have at present no objection to the recruitment of coolies in the State for the Ceylon Government Indentured Labour

¹ Radhakrishna Aiyar says : " It is said that the last king of Kandy, Vikrama Raja Singha, was a native of the State having been borne in Karukkappulampatti in Tirumayam Taluk ". P. 366 of *A General History of Pudukkottai State* (1916).

Force under the condition proposed by the Colonial Secretary provided that the recruiter licences are issued by me. The Darbar also wish, however, to make it clear that they reserve their right to impose restriction on recruitment should necessity arise hereafter".¹ But such a necessity does not seem to have arisen and Pudukkottai lent itself as a major source of labour supply for Ceylon. The Ceylon Labour Commission had an agent's office at Pudukkottai for the 'Pudukkottai Circle for Despatching Coolies' with the interesting telegraphic address of PEPPER.²

The number of persons who emigrated from Pudukkottai to Ceylon, as gathered from the Reports on the Administration of the Pudukkottai State, are furnished below for a few years:

<i>Year.</i>		<i>Number of emigrants to Ceylon.</i>
1920-21	.. ..	669
1921-22	.. ..	1,402
1922-23	.. ..	3,019
1923-24£	.. ..	3,387
1924-25£	.. ..	3,356
1925-26£	.. ..	5,892
1926-27£	.. ..	6,048
1927-28£	.. ..	13,305
1928-29£	.. ..	10,831
1929-30	.. ..	4,315
1930-31	.. ..	4,083
1932-33	.. ..	2,153
1933-34£	.. ..	6,032
1934-35£	.. ..	7,163
1935-36	.. ..	3,485

¹ National Archives Records, New Delhi.

² Darbar Records. Pudukkottai.

£ These years were periods of agricultural distress and the number of emigrants rose with the rising intensity of famine and subsided with the improvement in the situation.

In his report on the economic survey of the Pudukkottai State, S. Dandapani Ayyar, Census Officer, Pudukkottai, stated¹ in September 1923 : "...The larger part played by emigration in the economy of the peasant's life deserves mention in this connection. As we have already seen, the population of the State rises or falls with reference to the character of the season. As is common with practice in the adjoining upland tracts, the natives of the State take to emigration to Ceylon, when there is a general failure of rain. There was emigration to Malaya, through the Nagapattinam port. The number of migrants during the eight years ending 1930 was less than 2,000. Owing to the slump in the rubber market and the general economic depression, these emigrants are now being repatriated. Emigrants to Burma are chiefly the proprietors, agents or servants of the Nattukkottai Chetti banking firms. This migration which is mainly confined to the comparatively prosperous² classes is for fixed periods and is also more steady as it does not depend on the vicissitudes of the season. Emigration of cultivators or labourers to Burma is uncommon.

Pudukkottai State has long been one of the favourite recruiting grounds for Ceylon labour ; and in the last decade the State was visited by an unusually prolonged period of drought, while there was unusually great demand for labour in the colony. Accordingly we find that during the five years from 1925 to 1929, 53,000 persons (or roughly one-eighth of the State population) left Pudukkottai for Ceylon ; these emigrants formed 70 per cent of the total number of emigrants during the decade 1921 to 1930. It may be mentioned in passing that although the population of the State forms only 2 per cent of the Tamil population of the country, it contributed during the period 7½ per cent of the Ceylon labour²".

Dandapani Ayyar's report contains the following figures on emigration from the Pudukkottai State :—

<i>Total emigrants.</i>			<i>Persons.</i>	<i>Males.</i>	<i>Females.</i>
1911	..	..	17,896	9,918	7,978
1921	..	..	22,104	11,678	10,426

¹ Durbar Records, Pudukkottai.

² It may be seen that the Census Officer's figures are many times the conservative figures available in the Reports on the Administration of Pudukkottai.

Estate Coolies.—

1911	..	..	15,871	8,374	7,497
1921	..	..	19,784	10,019	9,765

Dandapani Ayyar also sounded a note of warning. He stated: “..The main industries in Ceylon, rubber and tea, are now passing through a period of acute depression. The rubber industry is not now prosperous. It is reported that some 1,00,000 acres of rubber have already closed down. Tea, except that grown in very high elevations is fetching poor prices ; but upcountry tea still continues to fetch high prices. Recruitment for labour in low country and midcountry districts is practically at a standstill, and emigration to Ceylon in 1931 was by far the lowest since 1923 and reflects the depressed state of the industries of the island. The majority of the Indian labourers are employed in up country districts and there appears to be no great danger for our nationals in the colony. But, it seems to remind us, however, that we cannot always depend on outside demand for our labour ”.

The sense behind the warning given by S. Dandapani Ayyar had been understood even before Independence. The departure of unskilled labourers to Ceylon had been banned by the Government of India by a notification on the 1st of August, 1939. But to some extent this was relaxed on the 1st of September, 1942. The ‘ passport system ’ was introduced in 1949. The Ceylon Government also introduced a visa system for the entry into Ceylon and brought the Immigration and Emigration Act, 1948 into force from November, 1949.

The independence of the British colonies brought the problem of refugees to the fore. The concept of nationhood accentuated the distinction between the natural and naturalized population. The return of Indian nationals from other countries where they were no longer wanted gave rise to the problem of their rehabilitation.

The Indo-Sri Lanka Agreement, 1964, provides for the repatriation of 5,25,000 persons of Indian origin in Sri Lanka to India together with their ‘ natural increase ’ over a period of 15 years.

It was expected that under their agreement, popularly known as the Shastri-Sirimavo Agreement after the signatory-Prime Ministers, about 35,000 persons would arrive in India every year. During the visit of the Prime Minister of India to Sri Lanka in April, 1973, both the Governments agreed to step up the pace of repatriation by 10 per cent every year. Taking into account the natural increase at the rate of 2.5 per cent of the residuary figure from year to year, it is now estimated that, totally, over 8,00,000 persons would be arriving under the provisions of the agreement.

The number of repatriate families that have come to India from Sri Lanka so far is as follows :—

	<i>Number of families.</i>
Up to 31st December 1968 ..	847
During 1969 ..	1,438
During 1970 ..	2,412
During 1971 ..	6,021
During 1972 ..	7,536
During 1973 ..	9,532
During 1974 ..	10,648
1—1—1975 to 30—9—1975 ..	4,716
Total ..	43,150

The Pudukkottai district has shouldered its share of the burden. The rehabilitation of Sri Lanka repatriates is looked after by the Collector. The District Revenue Officer (Rehabilitation) and the Special Deputy Collector (Rehabilitation), Tiruchirappalli were directly in charge of this work till the formation of Pudukkottai District.

The repatriate families are given assistance to establish themselves in their homeland. The repatriates arriving in the district as elsewhere in Tamil Nadu, are resettled by grants of loans for trade and business, and by settling them in Land Colonisation Schemes started in forest lands at the disposal of the Government and by giving them suitable training and employment.

A study made by the Central Director of Rehabilitation, Madras, of the pattern of arrival of Sri Lanka repatriates to the several districts in the State during 1974 revealed that 15 per cent of the arrival in the year went to Pudukkottai district, constituting a large proportion of the arrivals. Thus, the repatriate population in the district is large.

As a large number of repatriates from Ceylon have been settled in this district, a Special Deputy Collector (Rehabilitation) has been appointed for this district in April 1976.

The particulars of settlement of repatriates in Pudukkottai district are furnished below:

	<i>Total number of</i>	
	<i>Families.</i>	<i>Persons.</i>
Number of repatriates from Burma settled in Pudukkottai district.	366	1,797
Number of repatriates from Sri Lanka settled in Pudukkottai district.	4,027	18,846

Details of expenditure incurred on various schemes in Pudukkottai district.

	1974-75.	1975-76.	1976-77 upto June.
	RS.	RS.	RS.
Total expenditure—			
Business loan to			
the repatriates—			
Burma repatriates.	6,200	1,05,800	6,000
Sri Lanka repatriates.	2,74,000	14,07,800	2,800

	1974-75.	1975-76.	1976-77 upto June.
	RS.	RS.	RS.
Total expenditure on housing loans to the repatriates—			
Burma repatriates.	7,000	2,750	3,150
Sri Lanka repatriates.	3,00,050	14,75,150	1,42,050
Total expenditure on other schemes—			
Land colonisation schemes.	4,04,263	11,96,520.40	..
Purchase of Agriculture land.	8,500.00	50,643.75	..
Subsidiary occupation.	..	1,20,600.00	..

These measures have helped in giving the repatriates a new lease of life in the land of their ancestors.

Co-operation.—The Administrative Reforms Commission says¹ on the origin of the cooperative movement: "The concept of the co-operative movement was introduced in India in the early years of the twentieth century, primarily as a means of helping the poorer sections of the agriculturists. Unlike in the western countries where co-operative effort originated from the people, the movement in India was officially inspired. Co-operative Societies have been sponsored by the Government and supported by it, through legislative enactments, budgetary provisions and regulatory measures. Though the movement is now about 70 years old in this country, by and large, it has continued to be officially supervised and controlled if not directly administered by the Government through a Department of Co-operation, and Tamil Nadu is no exception. The initiative for any new effort,

¹ Report of the Administrative Reforms Commission in Co-operation (1974)

change or reform has almost always come from the Government though in actual implementation of schemes, the participation of members and non-official leaders has largely contributed to their success. The enactment of the Co-operative Credit Societies Act of 1904, by the Government of India, on the recommendations of an able Madras Civilian, Sir Frederic Nicholson, who was placed on special duty by the Madras Government to enquire into the possibilities of forming agricultural banks, may be said to have officially ushered in the co-operative movement in India. The Act of 1904 provided for the establishment of rural credit societies. It was followed soon by another Act in 1912 to provide for the formation of societies for purposes other than credit, as well as for the organisation of higher supervisory and financial institutions in the field of credit itself. In 1919, co-operation became a provincial subject administered by a popular ministry. This gave a further impetus to the movement and the number of societies registered a striking increase. Based on the recommendations of a Committee headed by Mr. Townsend, the Madras Co-operative Societies Act of 1932 and the Madras Co-operative Land Mortgage Banks Act of 1934 were passed. The Act of 1932 strengthened the hands of the Registrar in dealing with bad societies for the realisation of moneys due to societies. The Act of 1934 enabled the State Government to guarantee the debentures of the Central Land Mortgage Bank, to provide for the appointment of a 'Trustee' on behalf of the debenture-holders and to the summary recovery of overdues of the Land Mortgage Banks. This Act was a landmark in the development of long-term credit in Tamil Nadu. The Madras Co-operative Societies Act of 1932 continued in force for 30 years till it was replaced by the comprehensive Madras Co-operative Societies Act of 1961, now in force".

A humble beginning was made at Pudukkottai in 1908 in the direction of organizing co-operative institutions in the State. in this year two Societies, a Rural Society at Karambakkudi and a Stores Society at Pudukkottai were formed. In 1944, this figure rose to 134. The Diwan-Peishkar was the ex-officio Registrar of Co-operative Societies, assisted by a Deputy Registrar and six Inspectors.

Co-operative Institutions Today.—The Pudukkottai district has been divided into two circles, namely, Pudukkottai and Arantangi. The Deputy Registrar, Pudukkottai has jurisdiction over Pudukkottai and Kulattur taluks. Alangudi, Tirumayam and Arantangi taluks are in the jurisdiction of the Deputy Registrar of Arantangi. For the audit of co-operatives in the districts, there is one Deputy Registrar designated as District Co-operative Audit Officer, Pudukkottai. Besides, there are a Regional Marketing Officer of the Tamil Nadu Co-operative Marketing Federation to arrange the distribution of fertilizers, and a Deputy Registrar working as Assistant Project Officer (Small Farmers Development Agency), under the administrative control of the Joint Director of Agriculture.

The Deputy Registrar of Co-operative Societies attend to general administrative work of the department such as registration of societies, registration of amendments to by-laws of societies, conduct of elections to the committees of societies, etc. They supervise all the co-operatives functioning in their circles. They periodically inspect Primary Land Development Banks, Marketing Societies, Urban Banks, Taluk Co-operative Unions, Central Bank's branches, Block Agro Service Co-operative Centres, etc. They also discharge the statutory responsibilities under the Tamil Nadu Co-operative Societies Act, like arbitration, execution, liquidation, surcharge enquiries, etc., relating to the societies in their circles. There are various posts of Sub-Registrars for different functions to assist the Deputy Registrar of the circle.

The District Co-operative Audit Officer is responsible for the audit and issue of audit certificates every year in respect of all the co-operative societies in the district. The Co-operative Sub-Registrars (Audit) assist the District Co-operative Audit Officer in supervising the work of auditors. The audit certificates relating to the agricultural credit societies and jaggery manufacturing societies may be issued by the Co-operative Sub-Registrars (Audit). The Senior Inspectors and Junior Inspectors audit the accounts of the societies allotted to them and submit their reports to the Audit Officer.

The following particulars will show the number of co-operative societies in the district and their financial turn over in 1974-75:—

<i>Serial number and type of societies.</i>	<i>Number of societies.</i>			<i>Total financial turnover for the co-operative year ended 1974-75.</i>
	<i>Pudukkottai Circle.</i>	<i>Arantangi Circle.</i>	<i>Total.</i>	
(1)	(2)	(3)	(4)	(5) (RS. IN LAKHS.)
1 Central Co-operative Bank.	1	..	1	378.77
2 District Supply and Marketing Society	1	..	1	72.84
3 Agricultural Credit Societies.	57	81	138	343.10
4 Primary Land Development Banks.	5	6	11	115.79
5 Urban Banks ..	2	1	3	25.70
6 Employees Co-operative Societies.	13	2	15	10.71
7 Co-operative Marketing Societies.	3	2	5	10.21
8 Primary Co-operative Stores.	8	7	15	87.12
9 Lift Irrigation Co-operative Societies.	84	100	184	..
10 District and Taluk Agro Service Societies.	6	6	12	3.73

Serial Number and type of societies.	Puduk. kottai Circle.	Number of societies.		Total financial turnover for the co-opera- tive year ended (1974-75).
		Arantangi Circle.	Total	
1	(2)	(3)	(4)	(5) (RS. IN LAKHS).
11 District and Taluk Co-op- erative Unions.	2	3	5	..
12 Labour Contract Co-operative Society,	1	Nil.	1	8.94
13 Printing Press ..	1	..	1	11.41

There is scope for an expansion of credit facility to agriculturists through co-operatives in the district. During 1974-75 only about 40 per cent of the total cultivation credit requirements was met by them. The Pudukkottai Central Bank has programmed to enlarge its coverage progressively.

As regards long-term credit a scheme for development of coconut plantations in an area of 1,000 acres in Alangudi taluk involving a financial outlay of Rs. 37 lakhs is under the consideration of the Government. It is proposed to introduce similar scheme in Kulattur and Tirumayam taluks also. Another scheme for sinking of new wells, deepening of existing wells and installation of pumpsets with Agricultural Refinance Corporation's assistance in Kulattur and Tirumayam taluks has been under implementation since 1973. Out of the financial outlay of Rs. 1,51.12 lakhs a sum of Rs. 1,05.17 lakhs was utilised till 31st August 1975.

There is scope for expansion of consumer activities in the Co-operative Sector. Government have sanctioned financial assistance to the tune of Rs. 2.05 lakhs to the Pudukkottai District Co-operative Supply and Marketing Society for the establishment of a supermarket

at Pudukkottai. The building selected for the location of the super-market is being remodelled. The supermarket will be opened shortly. It is also proposed to establish mini-supermarkets at Arantangi and Ponnamaravati.

For liquidating rural indebtedness and facilitating easy flow of consumption loans to the rural masses, the co-operative Central Bank, its branches, the viable credit societies affiliated to the Co-operative Central Bank and the Urban Banks are advancing loans on jewels to the people in the district. The value of such loans issued to the people from 1st July 1975 to 31st January 1976 is Rs. 7.08 lakhs. From 1st February 1976 to 30th June 1976 a total loan of Rs. 13.71 lakhs was issued. Steps have been taken to increase the quantum of the loan further, at the same time limiting the maximum amount per individual to Rs. 1,000 so that more number of persons may derive the benefit.

The procurement and distribution of essential commodities such as rice, sugar, wheat and wheat products, coarse grains, kerosene, etc., are undertaken by Pudukkottai District Co-operative Supply and Marketing Society, Primary Co-operative Stores and Village Co-operative Agricultural Credit Societies in rural and urban areas. There are 151 retail points opened by co-operatives for the distribution of essential commodities in the district. The Government of India have sanctioned a sum of Rs. 50,000 as margin money to the Pudukkottai District Co-operative Supply and Marketing Society to secure larger bank credit to undertake the distribution of essential commodities to the general public. The value of sales amounted to Rs. 30.43 lakhs during the period from 1st February 1976 to 30th June 1976. The Co-operatives ensure regular and prompt supply of essential commodities to the rural masses.

The Pudukkottai District Co-operative Supply and Marketing Society is the wholesaler for the distribution of controlled cloth in the Pudukkottai district. It procures controlled cloth and distributes the same through village co-operative agricultural credit societies, co-operative stores and co-operative marketing societies in urban and rural areas. There are 18 units in urban areas and 130 units in rural areas engaged in the distribution of controlled cloth. Government of India have sanctioned a sum of Rs. 39,700 as margin money

for securing working capital funds from the co-operative banks at a margin of security of 10 per cent and revolve the said funds in the business of procurement of controlled cloth, stocking, etc.

There are four hostels in HH. The Rajah's Government Arts College and one each in Kalaigner Karunanidhi Women's Arts College and Government B.T. College at Pudukkottai.

The Pudukkottai District Co-operative Supply and Marketing Society, Pudukkottai and Pudukkottai Urban Co-operative Stores are supplying the essential commodities, groceries, etc., to these hostels at subsidised rates. The value of goods supplied to these hostels amounted to Rs. 3.85 lakhs during the period from 1st July 1975 to 30th June 1976. The value of supplies made by the consumer co-operatives to the hostels is indicated below :

From 1st July 1975 to 30th June 1976 Rs. 3.85 lakhs.

Supply of text books at controlled prices to students has also been ensured. Twenty-four students' co-operative stores have been organised apart from the three students' co-operative stores which are already functioning. Further, two other students' co-operative stores which were practically dormant previously, have been revived to cater to the needs of the students. Thus the total number of students' co-operative stores is 29 in this district and these are engaged in the purchase of text-books and other stationery articles required for students and their supply at controlled rates. During May and June 1976 the total sales effected in the distribution of text-books through the students stores amounted to Rs. 3.21 lakhs, in the district.

Under the National Co-operative Development Corporation Scheme of assistance for distribution of consumer goods in rural areas, 20 Village Co-operative Agricultural Credit Societies in Alangudi taluk were selected during 1975-76 and given a financial assistance of Rs. 3,000 each for purchase of furniture and fixtures. They are now selling consumer goods.

With a view to improve the efficiency of the administration of the co-operatives in the district, Co-operative Departmental Officials have been appointed as Special Officers of the Pudukkottai Central Co-operative Bank, the Pudukkottai District Co-operative Supply and Marketing Society, the Pudukkottai Co-operative Printing Press and five Co-operative marketing societies and 10 co-operative land development banks in the district in the place of their committees for a period of one year from 10th June 1976, under the Tamil Nadu Co-operative Societies (Appointment of Special Officers) Act, 1976.

Role of Panchayat Unions.—There are Labour Contract Co-operative Societies and Block level Co-operative Agro-Service Centres in the district. The Panchayat Unions entrust to the former the work of laying roads, sinking wells, repairing tanks and to the latter works such as the repair of tractors, sprayers, etc. They supply to the ryots improved seeds and pesticides through the Co-operative Societies.

Agro Engineering and Service Co-operative Federation.—In Pudukkottai District, as elsewhere in the State, agro-service activities have been organised by 'Tamil Nadu Agro-Engineering and Service Co-operative Federation Limited'. This is a State level organisation at the apex of agro-service centres that function both at the block (panchayat union) level and also at the district headquarters. A realization of the useful role that can be played by co-operatives in the servicing of the agricultural machinery and implements and the distribution of other agricultural inputs, has led to the establishment of these centres. Block level Agro-Engineering and Service Co-operative Centres have been organised in all the district's 10 blocks. In addition to the above, a district level centre has been started at Pudukkottai itself. With Rs. 2.89 lakhs assistance from National Co-operatives Development Corporation and an additional assistance of Rs. 1.3 lakhs from the State Bank of India, along with the district centre's own share capital contribution of about Rs. 71,000 the district centre has commenced functioning in a full fledged manner with an engineer as Chief Executive and adequate number of technical hands. The activity of custom-hiring of tractors and custom servicing of agricultural machinery has been taken up initially; diversifi

cation into other fields will follow when the activities gather momentum. The district centre has also commenced trading in agricultural equipments, like sprayers, dusters, pipes and fittings, pesticidss and other agricultural inputs. Although the district centre is hiring out for the farmers only 2 tractors with matched implements it is proposed in the near future to develop it as the leading workshop and service centre in the district for rendering agricultural engineering services for the benefit of farmers.

The 10 block level centres have started custom-hiring and servicing activities in tractors at each centre. These centres have been included under the Half-a-Million Jobs Programme and financial assistance to the tune of Rs. 50,000 for each centre has been extended by Government. Project reports of the Block Level Agro Service Co-operative Centres have envisaged the purchase of two tractors with matched implements for each block level centre for being hired to the farmers. The District Co-operative Agro Service Society will ultimately have a fleet of 6 to 8 tractors with matched implements for custom hiring purposes. The Tiruvarankulam Agro Service Centre at Martandapuram was the earliest to be started in March 1972 and all other Centres have started functioning effectively only from July 1975. Presently all these centres put together have a fleet of 11 tractors. On an average during the season, an area of about 500 to 600 acres per month are ploughed by these tractors. The Small Farmers Development Agency in Pudukkottai District has recognised these block level centres as agencies for hiring tractors to small and marginal farmers in this district at subsidised rates of hire charges, the subsidy being 25 per cent for small farmers and 33 1/3 per cent for marginal farmers.

Each centre will be equipped with a mini workshop so that minor repairs to agricultural implements and machinery for the farmers can be done at the block level itself. In order to create a sense of participation among engineers and other staff running these centres, it is proposed to make them share holders. The Government of Tamil Nadu have extended guarantee to the State Bank of India to the tune of Rs. 2 lakhs for extending loan to each of these centres for the purchase of custom hiring machinery and

workshop equipment. The current financial assistance extended to these centres may be seen in the statement below :—

<i>Name of Agro Service Centre.</i>	<i>Government share capital.</i>	<i>Share capital from Members and Societies.</i>	<i>Sanction sought in Project Report.</i>	<i>Financial assistance sanctioned by State Bank of India.</i>	
				<i>I Phase.</i>	<i>II Phase.</i>
(1)	(2)	(3)	(4)	(5)	(6)
(RUPEES IN LAKHS.)					
1. Pudukkottai District Co-operative Agro Service Society at Pudukkottai.	..	71,000	10.435	SBI. *	
				1.33	
				+	
				by	
				** (NCDC :	
				2.89).	
*SBI : State Bank Of India.					
**NCDC : National Co-operative Development Corporation.					
1 Arimalam ..	50,000	10,510	1.75	0.96	..
2 Annavasal ..	50,000	10,000	1.75	0.81	0.20
3 Arantangi ..	50,000	10,780	1.75	1.04	..
4 Karambakkudi ..	50,000	9,970	1.75	1.03	..
5 Kunnandarkovil ..	50,000	10,000	1.75	0.96	..
6 Manamelkudi ..	50,000	13,280	1.75	1.04	..
7 Ponnamaravati ..	50,000	10,130	1.75	0.95	..
8 Tirumayam ..	50,000	10,150	1.75	Yet to be sanctioned.	
9 Viralimalai ..	50,000	11,150	1.75	1.34	..
10 Tiruvarankulam.	50,000	11,250	1.10	1.04	0.775
			(I Phase)		
			1.27		
			(II Phase)		

Besides hiring of tractors and implements, these block level centres undertake diverse jobs like preparation of civil estimates for Land Development Bank Schemes, sale of pesticides, diesel oil, seeds and other agricultural inputs. These centres are also engaged in mass ground spraying of pesticides on paddy, ground-nut and other crops. Another important feature marking the advent of these service centres is that they offer ample employment opportunities to technical and non-technical personnel, both skilled and non-skilled. This gains importance in the current context of programmes to promote employment.

It is hopefully anticipated that under the aegis of Encofed all these block level centres and the district centre will ultimately form a net-work of full-fledged workshops offering a variety of agro-services to the rural community.

The administration of the Pudukkottai District Co-operative Agro Service Society has been entrusted to a Special Officer, instead of the Board of Management, in order to tone up the administration. To relieve unemployment amongst educated youth it has been proposed that the Block level centres and District level agro-service societies in Pudukkottai district will recruit Industrial Training Institute's trained hands for the post of tractor drivers, mechanics, fitters, etc. They also supply agricultural implements and equipments to the small and marginal farmers under subsidy scheme.

Land Development Banks.—There are 5 Primary Land Development Banks in the Pudukkottai Circle and 6 in Arantangi Circle. Their names and addresses are furnished below :—

Pudukkottai Circle—

<i>Name of the Land Development Bank.</i>	<i>Address.</i>
(1)	(2)
1 Pudukkottai Primary Land Development Bank.	East Main Street, Pudukkottai, Pudukkottai district.
2 Keeranur Primary Land Development Bank.	Keeranur, Kulattur taluk, Pudukkottai district.
3 Viralimalai Primary Land Development Bank.	Viralimalai, Kulattur taluk, Pudukkottai district.

Pudukkottai Circle—

<i>Name of the Land Development Bank.</i>	<i>Address.</i>
(1)	(2)
4 Annavasal Primary Land Development Bank.	Annavasal, Kulattur taluk, Pudukkottai district.
5 Gandharvakkottai Primary Land Development Bank.	Gandharvakkottai, Pudukkottai district.

Arantangi Circle—

6 Arantangi Primary Land Development Bank.	Arantangi, Pudukkottai district.
7 Avadayarkovil Primary Land Development Bank.	Avadayarkovil, Arantangi taluk, Pudukkottai district.
8 Karambakkudi Primary Land Development Bank.	Karambakkudi, Arantangi taluk, Pudukkottai district.
9 Arimalam Primary Land Development Bank.	Arimalam, Tirumayam taluk, Pudukkottai district.
10 Tirumayam Primary Land Development Bank.	Tirumayam taluk, Pudukkottai district.
11 Ponnamaravati Primary Land Development Bank.	Ponnamaravati, Tirumayam taluk, Pudukkottai district.

Primary Land Development Banks advance long-term loans to agriculturists for land development purposes, such as sinking of new wells including bore wells, deepening of wells, repairs to wells, installation of diesel pumpsets, laying of pipelines, construction of cattle-sheds and farm houses, purchase of tractors and other agricultural machinery, reclamation of lands, etc., and also for the discharge of prior debts, purchase of land for 'rounding-off' holdings.

Public Works Department.—Tracing the historical background of this department, the Administrative Reforms Commission says : "The formation of a separate Department for Public Works in this State, dates back to 1858. Before that, Public Works were being handled by three different agencies, namely, the Maramat Department under the Board of Revenue, the Trunk Road Department and the Engineering Department of the Military Board. The

Maramat Department was in charge of all irrigation works, navigable canals, civil buildings and all roads and bridges not under the control of other two departments. The Trunk Road Department was in charge of the formation and upkeep of all main roads and the Engineering Department of the Military Board, of all military works, works in cantonment areas and civil works in the Presidency Town. On the basis of the report of the Public Works Commission in 1852, all the three organisations were abolished and the Public Works Department was constituted in 1858, for the better management of all works, with a staff of one Chief Engineer, and Assistant, 3 Inspecting Engineers, 20 District Engineers and the necessary complement of subordinate staff. Further re-organisation was ordered in 1863 when the Chief Engineer was made Secretary to the Government and many of his supervisory powers, as head of the department, were delegated to field officers. A Second Chief Engineer to deal exclusively with all irrigation works, was appointed in 1867. Even so the thousands of irrigation tanks scattered all over the country-side, received inadequate attention and therefore all minor irrigation works with less than 200 acre of ayacut, were transferred to the Revenue Department in 1878 and dealt with by special minor irrigation Overseers under District Collectors. Similarly, the bulk of District Roads were transferred to the newly constituted Local Boards, the Public Works Department retaining only the Trunk Road, now designated as National and State Highways. Around 1890, military works were separated and taken away from the Public Works Department. The Chief Engineer ceased to be the Secretary to the Government in 1924, ostensibly to give him more time for field inspection, instead of being tied down to Headquarters on Secretariat duties. Perhaps this decision was also in anticipation of Political Reforms under which the subject was then expected to be transferred to the control of Ministers responsible to the Provincial Legislature. In recent years, a new Department and several Statutory Organisations have been formed to share the original functions of Public Works Department. The formation and upkeep of all Trunk Roads and bridges were taken over by the Highways and Rural Works Department. The State Housing Board and the Slum Clearance Board handle the housing schemes relating to the middle and low income groups and the slum dwellers. The Tamil Nadu Water Supply and Drainage Board

looks after all water-supply, drainage and other public Health Engineering Schemes. Statutory boards have been formed mainly for the purpose of raising resources outside the State Budget. Functional distribution of work among these organisations and departments, facilitates specialisation and enables officers to acquire the needed expertise in the respective disciplines."

There are two Public Works Department divisions in Pudukkottai district, one at Arantangi and the other at Pudukkottai. The Arantangi division was formed with effect from 1st December 1974. The Superintending Engineer, Tiruchirappalli Circle exercises general control over both these divisions.

The Public Works Department is in charge of the maintenance of irrigation tanks and other sources, Public buildings, important electrical works of the Government¹ etc.

The Public Works Department had a very important role to play in the implementation of the drought relief schemes. The Kavinad tank which is the biggest of its kind was improved under the drought relief schemes at a cost of Rs. 12 lakhs. The minor and major irrigation works costing about Rs. 11 lakhs and Rs. 12.5 lakhs respectively have also been undertaken by this department, after the formation of the district.

In addition to these the improvement of the Kallanai Chennal and the deepening of wells in the Machuvadi cattle farm, are the important items of works undertaken by this department.

In the maintenance of the tanks, which happen to be the most important source of irrigation in the Pudukkottai district, the Public Works Department plays a unique role. There are 4839 tanks in the district. out of which 141 tanks have ayacuts of more than 200 acres. Now, 506 tanks, each having a registered ayacut of more than 100 acres, are maintained by the Public Works Department. This department also explores the possibility of restoring the capacity of the tanks lost by soil erosion, by desilting and raising their Full Tank Level. So far 1503 tanks have been investigated under Desilting cum Reclamation schemes out of which 174 have been found suitable. These schemes greatly help increase the extent of irrigable land in the district.

In the development of public works in this area specially after its becoming a new district, the contribution of the Public Works Department has been significant and it is bound to become more so in the coming years.

Registration Department.—The Registration Officers in the erstwhile State were merged with the Tiruchirappalli Registration District, after the integration of the state. Pudukkottai was however, made separate Registration District in 1951.

It is now one of 34 Registration Districts in Tamil Nadu. The employees of the former Pudukkottai State were absorbed in the State on integration of their services.

A District Registrar is incharge of the work of the department in the district. There are 18 Sub-Registrars Offices in the district. The District Registrar is assisted by a Joint Sub-Registrar in his office. The District Registrar's Office comprises of two parts : the original Registration Branch, attending to work under the several Acts administered by this Department, and the Administrative Branch attending to Establishment, Accounts and allied matters pertaining to district administration.

The following Acts are administered by the Registration Department :

1. Indian Registration Act, 1908.
2. The Indian Stamp Act, 1899.
3. The Tamil Nadu Chit Fund Act 1961.
4. The Special Marriage Act, 1954.
5. The Birth, Death and Marriage Act.
6. The Hindu Marriage Act, 1965.
7. The Dowry Prohibition Act,
8. Indian Christian Marriage Act,
9. The Societies Registration Act,
10. The Indian Partnership Act, 1932.

The District Registrar is the Inspecting Officer of Chits under the Chit Fund Act. He is the competent authority to sanction prosecution for offences under the Dowry Prohibition Act. He is also the Registrar under the Societies Registration Act and the

Indian Partnership Act. The District Registrar is a Collector under Sections 31, 32, 38 (2), 40, 41, 42, 48, 56 and 70 of the Stamp Act. Each Sub-Registrar is a 'Registrar' under the respective Acts mentioned as item Nos. (3) and (5) above and Marriage Registrar under Hindu Marriage Act and Marriage Officer under Special Marriage Act. The Sub-Registrars have also been appointed as Collectors under Section 16, 41 and 42 of the Stamp Act. The various Acts and rules as in the force in this State were extended in Pudukkottai area on its merger.

The number of documents registered, Encumbrance Certificate issued, Certified copies, revenue receipts etc., in the Pudukkottai Registration District are furnished below :

Particulars.	1970-71	1971-72	1972-73	1973-74	1974-75
(1)	(2)	(3)	(4)	(5)	(6)
1 Number of documents registered.	34,179	32,337	36,076	34,922	38,681
2 Number of Encumbrances Certificate issued.	10,162	9,220	9,116	8,533	10,272
3 Number of Certified copies.	3,156	3,054	3,110	3,018	3,325
	RS.	RS.	RS.	RS.	RS.
4 Revenue ..	6,44,158-92	6,21,771-45	6,24,199-89	7,67,072-31	8,85,479-21
5 Expenditure ..	3,67,971-18	4,52,589-99	4,36,495-01	5,31,991-23	5,18,479-19
6 Aggregate value for item (1) above.	6,86,09,306	6,04,94,224	6,13,98,307	7,61,04,448	11,03,87,188

The registration office is the custodian of records relating to title to property worth several crores. Service to the public is rendered by the registration of documents, issue of certified copies and encumbrance certificates on immovable property, registering marriages, Firms, Societies and chits under the various Acts, etc.

Action under section 47A of the Indian Stamp Act is resorted to wherever under-valuation in documents is suspected. In the four months, from March to June 1976, action has been initiated in 243 cases in this district under section 47A, which has brought additional revenue Rs. 2,940-45. The department has also initiated proposals to revise the guideline

for the determination of market value and for taking up the audit work with some officers from the Accountant General's office. There are also proposals to tighten the control over the chit-fund companies by amending the Chit Fund Act.

Museum.—The Pudukkottai Museum is a branch museum of the Madras Government Museum. Though it was proposed to form a museum at Pudukkottai as early as 1896, a decision to do so, locating it in the 'Small Palace', was taken only in 1909. The museum was organized and opened for the public in 1910. This museum, even though small in size, houses all the usual museum specimens.

At present, this Museum contains the following sections. Geology, Zoology, Arts and Industries, Anthropology, Economic Botany, Epigraphy, Numismatics and Archaeology. The Geology collections include the mineral wealth of Pudukkottai and extra regional specimens are also exhibited. The Zoological collections are fairly representative of the fauna of Pudukkottai area which, in turn, represents the fauna of South Indian Plains. The Zoological exhibits form the largest collection in this Museum. All the representative phylums under invertebrates and classes of vertebrates are exhibited. The Arts and Industries Section consists of paintings of various schools such as Deccani, Rajasthani and Tanjore and Modern, photographs of Dances of India, Earthenwares, metalwares textiles and Handicrafts which are manufactured and used in the erstwhile Pudukkottai State.

The Anthropology Section contains the arms and armour of the Old Palace Armoury, such as swords, spears, valarics, guns, models of modern war appliances and helmets. The Ethnological exhibits in this gallery include different kinds of Thalies, Jewels and ornaments and musical instruments. In the pre-historic section the burial urns, Iron weapons, beads, bangles and potteries that were excavated from the Megalithic burial sites in this area can be seen. The Epigraphy section contains copper plates and historical records, etc., relating to this area. The Economic Botany gallery includes a small nucleus collection of Botanical objects.

Some important varieties of Cereals, oil seeds, Timbers, fibres and Agricultural implements used in this area are exhibited. The Numismatics section contains representative collections of Roman coins (found in the erstwhile Pudukkottai State) as well as Vijaya nagar, Andhra and other South Indian coins such as those issued by the Mughals, Bahmini Sultans, the French, Dutch and English East India Companies.

The Archaeological gallery is full of representative collections of fine art pieces of various periods. The Kodumbalur sculptures are worth seeing. The bronzes exhibited in this Museum are fine art objects of South India.

Government Branch press.—The State Press was inaugurated by the Pudukkottai State in 1861 at Tirugokarnam, 30 years after the establishment of the Government Press, Madras. The press was named 'Sri Brihadamba State Press'.

In the year 1878, it was strengthened a State Gazette being launched for the first time in 1879, as a bi-monthly. This Gazette was converted into a monthly publication in July 1881. The State Press was shifted to the newly constructed Public Offices Building in the year 1892. The Press was under the direct control of the Darbar and was managed by a Superintendent. The following important publications were printed by the Superintendent of the Press.

1. The Pudukkottai State Manual, Vol. I and II.
2. The History of Pudukkottai.
3. A Child's History of Pudukkottai.
4. The Pudukkottai Darbar's Standing Orders.
5. The Pudukkottai Criminal Procedure Code.
6. The Pudukkottai Civil Procedure Code.
7. The Pudukkottai State Legislative Council Debates.
8. The Pudukkottai State Alamanac.
9. The Pudukkottai State Leave Rules.
10. The Pudukkottai State Provident Fund Rules.
11. The Pudukkottai State Civil Services Manual.
12. The Printed Indexes.
13. The Pudukkottai State Pension Rules.
14. The State Administration Reports.
15. The Pudukkottai State Gazette (weekly).
16. The Pudukkottai State Acts and Regulations.

Sir Alexander Tottenham, I.C.S., who was Administrator of the State during the second quarter of the century evinced keen interest in the affairs of the Press. He has observed about the working of the Press :

“The typography and general get up of the work turned out by the Press, including binding, are of a higher order of merit and reflect credit on all concerned. The promptitude, with which urgent works are executed is also commendable. I think our Press does extremely good work, taken all round, though it is slow sometimes owing probably due to congestion. Our Gazettes, Administration Reports, etc., compare quite favourably with that of Travancore, Cochin, Mysore. I think our work is better than Government of India work, if not so good, perhaps, as that of Madras ”.

In the year 1937, a special officer was appointed to examine and report to the Darbar the feasibility of improving the State Press on modern lines.

After the merger of the State, though there was a proposal to abandon this Press, considering the good work turned out in past, the proposal was given up and the Press was amalgamated with the Government Press in the year 1949, and was renamed the “Government Branch Press, Pudukkottai”. At the time of merger, the employee-strength of the Press was only 79. The figure now is 235. In the initial stages of the post merger period, a Foreman from the Madras Government Press, designated as Officer-in-charge, was deputed to look after this Press.

A Gazetted Officer in the rank of an Assistant Works Manager in Tamil Nadu Stationery and Printing Service was sanctioned from 21st May 1954.

In order to utilise the machine capacity to the optimum level and give job opportunities to the local populace, a second shift was introduced on 14th January 1961, which happened to be the centenary year of this Press.

The Press works in two shifts. Necessary staff in the supervising and other categories are working in normal hours to co-ordinate the work of the shifts. The hours of work are as indicated below :

<i>Monday to Saturday.</i>	<i>Interval.</i>
I Shift 6 a.m. to 2 p.m.	9-30 a.m. to 10-00 a.m.
II Shift 2 p.m. to 10 p.m.	5-30 p.m. to 6-00 p.m.
Normal 9-00 a.m. to 5-30 p.m.	1-00 p.m. to 2-00 p.m.

Total working hours for a week is 45 hours (from 14th April 1974). The employees of the Press worked overtime till 13th April 1974.

The composing section is the backbone of the Press. The whole work relating to the planning is to be started from here and the decision of taking up and execution of a work is to be decided at this stage. The following are the items executed in this Branch Press :—

1. Gazettes of all the fourteen districts (monthly) with supplements in English and Tamil, Gazettes Extraordinary.

2. District Intelligence Bureau work in respect of Madurai, Ramanathapuram, Thanjavur and Pudukkottai districts consisting of weekly crime and occurrence sheets, monthly crime and excise reviews, etc.

3. Non-Standardised forms for the use of the High Court and other departments.

4. Standardised forms relating to The Madras Accounts Code and The Madras Financial Code, Pension Groups.

5. Press-made articles like metallic books, survey books, 'one-third margin' sheets, etc., are manufactured on indent from the Stationery Branch and supplied.

6. Other items of work entrusted from the head office, Madras are also undertaken.

The printing of a large quantity of electoral rolls was entrusted to this branch Press during the 1971 Elections. The printing of several notifications consisting of thousands of pages relating to Land Reforms was also done here.

The Despatch Section consists of three despatchers and three packers. Apart from the routine items, about 200 kinds of standardised forms are printed and despatched to 1,400 unit officers in the Tamil Nadu State.

The Store functions under a Storekeeper in the grade of Junior Assistant (Security Post) and he is assisted by three warehousemen. Various items of stores, articles and printing papers are stocked and issued to the technical sections.

There are no records to show when exactly the several machines now in the Press were installed. The machines are run with a 15 H.P. Motor under 'group driving system'. There is a proposal to replace these machines and strengthen the capacity by shifting some machines from the head office. An 'annexe' to the main building has also been constructed to erect the additional machines. The machines now working have been in commission from the State period and have outlived their normal lease of life. But by efficient and proper maintenance, the machines are running in a fairly satisfactory condition, even though they fall sick very often.

There is also a proposal to replace the old printing machines. An annexe in the western side of the main building with a floor space of 310 sq. metres has been constructed and is ready for the erection of new machinery. In order to augment power supply, a separate L.T. supply with an installed capacity of 130 horse power has also been sanctioned. There is a proposal to introduce a third shift in this Branch Press, as in the Central Press at Madras. The main difficulty experienced in this Branch Press is the staggered supply of electricity since February 1973.

In order to augment production in the Composing Section 'two inter-type' machines capable of setting in English and Tamil were installed in the year 1961. One 'Mono type' keyboard and caster and one 'loose type' caster have been erected and commissioned in May 1975.

Most of the machines now in the binding section are small, and are hand-operated. Apart from executing the various items of printing work, some of the stationary items are also manufactured and

supplied on annual indents. This section has done excellent work during the past, comparable to that of the Government Press, Madras.

A recreation and sports club is maintained, for which annual grants from the Labour Welfare Fund are sanctioned by the Director of Stationery and Printing. A rest-shed has been constructed for the use of employees. A cycle-shed has also been constructed for parking the cycles. There is a proposal to provide housing facilities to the employees, under the Village Housing Programme.

The apprenticeship training, has a particular relevance here. 20 trade apprentices have been appointed in the Government Branch Press, Pudukkottai. The apprentices are paid stipends at Rs. 130 per month in the first year of their two years' training and at Rs. 140 per month in the second year.

In order to tone up efficiency in administration, the department has now been restructured, with necessary delegation of powers and decentralization of work.

The Tamil Nadu (Amendment and Special Provisions) Act, 1976 (Act 24 of 1976), came into force with effect from 1st June 1976. From this date, all the non-hereditary trustees of all the temples in the State ceased to function. Either the Village Officer or any other Government servant has been appointed as 'Fit person' of each temple. Where there were already Executive Officers, they have taken over the administration of their respective temples.

Hindu Religious and Charitable Endowments Department.—The Assistant Commissioner, Hindu Religious and Charitable Endowments (Administration) Department, Pudukkottai, has jurisdiction over the entire Pudukkottai district and Manapparai and Kulitalai taluks of Tiruchirappalli district. There are two Inspectors under him, each one of whom is in charge of the work in a revenue division. There are two Special Inspectors who investigate into the question of bringing new temples under the control of the department. There are five Executive Officers in the District. The Executive Officer, Mimisal, is in charge of the management of the Kalyanarama temple, Mimisal, and the one at Tiruppunavalai is in charge of Vrithapureswarar temple. The Balasubramania temple, Nagaram is managed

by the Executive Officer. The Executive Officer, Arantangi, is in-charge of the Veeramakaliamman temple. The Pudukkottai Devasthanam has 117 temples in its management.

There are 494 temples under the control of the department in Pudukkottai district. In 1974-75, the revenue of these temples was Rs. 9,74,159. Besides this, a grant of Rs. 4 lakhs was also received from the Government. The Government give Rs. 6,000 annually for the maintenance of 'Pooja Veedu' to the Raja of Pudukkottai. The amount of Rs. 4 lakhs to the temples has been raised to Rs. 5 lakhs for 1975-76. An additional sum of about Rs. 1,50,000 is received annually from the Pudukkottai devasthanams by way of *hundial*, *archanai* and other sources of income from worshippers.

The following charitable activities are also carried on in the temples of Pudukkottai:—

(i) The Ramachandra Vilas Dharmam, Pudukkottai runs a water pandal.

(ii) Through the medium of the endowment called 'dvadasi kattalai', the temple at Alangudi conducts mass feeding on the dvadasi day every month.

(iii) 'Karunai Illam', an orphanage run by the Pudukkottai Devasthanam for 50 boys, is run from the centralised funds collected from temples.

(iv) A high school at Pallathur is maintained.

Wakf Board.—The Superintendent of Wakfs at Tiruchirappalli has jurisdiction over the entire district. There are 185 Wakf institutions in Pudukkottai district under the supervision of the Tamil Nadu Wakf Board. Their details are furnished below¹:—

Description. (1)	Number. (2)	Net income in (3)	
		RS.	P.
Mosques	75	29,534	57
Dargahs	24	5,301	79
Madrasas	19	39,773	01
Kabaristan	64	Nil.	
Idgahs	3	Nil.	
	185	74,609	37

¹ Source : Letter from the Secretary Tamil Nadu Wakf Board, Madras-4.

Fire services.—Essential to human life as it is, instances are not rare when fire has proved to be a horrible instrument of destruction. Lives and properties of inestimable value have been lost on various occasions because of an outbreak of fire, either accidental or deliberate. Setting fire in enemy-land has always been one of the brutal weapons of war-time. Radhakrishna Aiyar refers¹ to the invasion of the Tondaiman's country by the Mysoreans and the French in 1754 and quotes Ram Naick, agent of the East India Company at Tanjore: "The enemy's troops are still in Kearanore and they began to set Tondaiman's country on fire (and have been at this work for) these three or four days. They arrived in Kearanore on the 15th (of May 1754) and as they began their havoc immediately after their arrival, it is thought that they have ruined that country entirely by this time. I see nothing but smoke and flames of fire everywhere during these four days."

A great fire accident consumed Pudukkottai town in 1812. It rose, however, phoenix-like from the ashes. The town was rebuilt on an improved plan consisting of a square of sixteen streets of which eight run east to west intersecting at right angles, the remaining eight that run north to south, with the royal assistance to poorer classes.²

A dry climate and the existence of a number of thatched sheds in this area have conduced to the incidence of outbreaks of fire. The Darbar of Pudukkottai did not, however, own any fire-fighting machinery. The people were mostly left to themselves in dealing with such cases. In major cases, fire service vehicles attached to Tiruchirappalli had to attend to the work in Pudukkottai area also.

A fire station was established at Pudukkottai only on 20th January 1958, in the Old Palace Building. The station moved to a building of its own on 8th June 1975. It is now the only fire station in the district. Equipped with two fire units, an ambulance and staff consisting of a Station Fire Officer, four Leading Firemen, seven Firemen Drivers, one Driver Mechanic and twenty-seven

¹ P. 197 of *A General History of the Pudukkottai State* (1916).

² P. 359-360, *ibid.*

Firemen, the fire station has, since its opening, received on an average 52 calls per year. There has been no fire accident recorded by it involving loss of life or loss of property worth more than Rs. 50,000. Facilities for imparting training in elementary principles of fire fighting to members of other government departments, quasi-government departments, private institutions, etc., are available at the station. Persons deputed from other departments or institutions are given the requisite training here.

Archaeological Survey of India.—Certain archaeological monuments and pre-historic sites in the erstwhile Pudukkottai State were declared as protected monuments by the Pudukkottai Darbar under the Pudukkottai Ancient Monuments Preservation Regulation No. VII of 1930. After the merger, the Ancient Monuments Preservation Act of 1904 (Government of India Act VII of 1904) was extended to this area with effect from 1st April 1949. In June 1949, the Department of Archaeology, Southern Circle, Madras (now redesignated as the Archaeological Survey of India) formally took over charge of all the monuments, protected and conserved by the erstwhile Pudukkottai State. These were declared as monuments of national importance under the provisions of the Ancient and Historical Monuments and Archaeological Sites and Remains (Declaration of National Importance) Act, 1951. Subsequently, this Act and section 126 of the States Reorganization Act, 1956, were repealed and replaced by the Ancient Monuments and Archaeological Sites and Remains Act, 1958 (No. XXIV of 1958), and the Central Government made the Rules called the Ancient Monuments and Archaeological Sites and Remains Rules, 1959. These came into force on the 15th October 1959.

A superintending Archaeologist for the Southern Circle, stationed at Madras, is in charge of the work of the Archaeological Survey of India in Tamil Nadu.

As per a Chronological List published by the Darbar in 1929, there are 1,130 inscriptions in the Pudukkottai State. Inscriptions 1 to 150, and 151 to 269 were translated into English by Thiru K. R. Srinivasan, the then Curator, State Museum, Pudukkottai, and were published by the Darbar—Part I in 1941 and Part II in

1946. Thiru Srinivasan left Pudukkottai service and joined the Archaeological Survey of India in 1946. With that, the work of translating the Pudukkottai inscriptions got discontinued.

Some of the significant archaeological remains of the district are described in Chapter XIX.

The Tamil Nadu State Farms Corporation.—This is a non-statutory private limited company of the State Government registered under the Company's Act with an authorised share capital of rupees 1 crore. The object of the Corporation is to take on lease for 35 years large areas of cultivable waste lands ranging from 40 to 400 hectares in different parts of the State in areas with good ground water potential for large-scale farming of crops especially paddy, utilising ground water, by putting up deep bore wells. It is estimated that at present about 11 lakh acres of cultivable lands are lying waste in this State. These will be brought under cultivation in a phased programme. It is proposed to cover 0.6 lakh acres during 1975-76.

Pudukkottai is one of the 5 districts in which this scheme is being implemented from 1975. It is proposed to cover 10,000 acres during 1975-76 in this district. Already work has commenced in 2 sites at Vellalaviduthi (657 acres) and Sammattividuthi (375 acres) in Alangudi taluk. Investigation of prospective waste areas is in progress and so far a total area of about 5,000 acres has been located and selected for this scheme.

In Vellalaviduthi site, a trial bore was put up to test the ground water potential and it has proved successful, giving an yield of 275 gallons per minute. It has a potential to irrigate 30 acres of wet crops.

On the whole, Pudukkottai district is considered as a potential district for ground water development and hence the success of farming by the State Farms Corporation is certain.

There are 2 Chief Farm Superintendents in the cadre of District Agricultural Officer in the district, one for investigation of waste lands and another for attending to farm work. There is one Tahsildar attached to the scheme, to assist in selection of land

and take over on lease. There is supporting staff of one Supervisor and one Sub-Assistant. When sites are taken over, one Deputy Agricultural Officer is appointed for each farm.

Apart from providing much needed employment to rural workers the projects of this Corporation also serve the end of rehabilitation of repatriates from Ceylon. The provisions of the Minimum Wages Act, recently passed by Government have also been implemented by this Corporation. The women labourers are now paid at Rs. 5 each, equally with the men labourers,. The hours of work have been reduced from 8 to 7, and in the case of hard work like ploughing, to 5.

The Tamil Nadu Small Industries Corporation (TANSI).—A statutory corporation, TANSI's main concern is the manufacture and supply of wooden furniture. There is a unit of this corporation in Pudukkottai district under the charge of a Superintendent. The unit started production on 16th August 1974. In 1974-1975, the value of the product of this unit was to the tune of Rs. 2,73,400, the sales amounting to Rs. 2,28,969. This unit has supplied various items of furniture to the Kalaignar Karunanidhi Agricultural Research Institute, Kudimiamalai, for Rs. 74,300, within this short period.

Tamil Nadu Warehousing Corporation.—This is a corporated body undertaken by the Government of Tamil Nadu.

Its functions are (i) to run scientific warehouses by personnel specially trained in the technique of management and operation of such warehouses ; (ii) to provide an instrument for extension of credit through commercial banks for the benefit of the producers, dealers and others by means of warehouses receipts ; (iii) to add to the nation's real income by reducing waste and loss in storage by applying scientific methods of storing ; (iv) to help orderly marketing by the introduction of standard-grade specifications and the warehouse receipts ; (v) to render assistance to Government and Government undertakings in their schemes of price support and price control.

This corporation started a warehouse at Pudukkottai during August 1975 with a capacity of 500 metric tonnes. From October 1975, the Arantangi centre has been attached as a sub-centre to Pudukkottai. This corporation has proposed to extend the facilities to all the agriculturists, traders, Government, co-operatives and other institutions, by constructing more number of godowns.

By providing storage facilities, this corporation enables the Civil Supplies agencies to easily go ahead with procurement and stocking operations. This also helps the farmers to avoid wastage and to get loans easily, and thus helps increase in production. The hired capacity of the godown in Pudukkottai district has been increased from 281 M. Tonnes to 981 M. Tonnes from July 1976. There is also a proposal to construct a godown with 4,400 M.T capacity, with ancillary buildings for office, quarters, etc., at Pudukkottai, at an estimated cost of Rs. 11.50 lakhs. The construction of the buildings is expected to be completed before March 1977. At Arantangi also the work of constructing a warehouse with 2,200 M.T. and ancillary buildings at a cost of Rs. 6.29 lakhs has been taken up.

The Tamil Nadu Civil Supplies Corporation has a Regional Office at Tiruchirappalli having jurisdiction over Tiruchirappalli and Pudukkottai Districts and the Regional Manager is managing the activities of the Tamil Nadu Civil Supplies Corporation Limited in the Region. This Corporation is the sole agency for procurement storage and distribution of essential commodities especially food grains and sugar through the model shops and Co-operative Societies in the District under the family cards system. All the model shops are maintained by Bill-clerks and there is one Assistant Manager at Pudukkottai to supervise the work in all the shops. He is also having general supervision over the Corporation godowns, hulling agents and direct purchase centres.

There are 32 godowns situated in 7 storage points in Pudukkottai District lying in Pudukkottai town, Tirumayam, Alangudi and Arantangi taluks. There is one Superintendent in Tirumayam Taluk in charge of storage points in that taluk and there is one Superintendent at Pudukkottai for the storage points in Pudukkottai and Alangudi Taluks and one Technical Assistant in charge of the godowns at Arantangi taluk.

There are 14 hulling agents in this district as detailed below :—

Avudayarkoil	..	..	1
Alangudi	..	..	2
Vallathirakottai	..	..	1
Kallur	..	..	1
Keeramangalam	..	..	1
Arantangi	..	..	8

Paddy procured by them within the district, paddy procured by the Direct purchase Centres of this corporation and by the procuring agent and the paddy received from Thanjavur region for enroute hulling are given to these hulling agents and the resultant rice obtained after hulling is distributed to the "Family Card-holders" through the Model Shops and Co-operative Societies as per the directions of the Collector and the remaining resultant rice is moved to other stations as per the directions of the Commissioner of Civil Supplies, Madras. There are two Double Lock Officers at Arantangi who are keeping joint custody of the paddy stock entrusted to the hulling agents and supervising hulling.

There are five corporation retail shops in the district. Each of them is located in the Taluk headquarters. These deal with all commodities that are supplied by the corporation. In addition there are 169 Co-operative societies which undertake the supply of essential commodities to the consumers. Essential commodities like rice, wheat products, sugar, etc. are supplied to these retail shops from the Pudukkottai and Arantangi godowns. From the retail-points card holders get the commodities as per the allotment made in the Family cards issued to them.

Tamil Nadu Civil Supplies Corporation—The corporation has opened up seventeen Direct Purchase Centres in the district. Similarly, to increase the storage capacity also, 32 private rented buildings were secured on rent for using as godowns in the district. The facility to draw the quota of wheat and wheat products either from the retail shop in which the card is registered or from any

other nearby corporation retail shop, subject to a maximum of 30 Kgs. of wheat per month, has now been extended to the card-holders.

Tamil Nadu Harijan Housing and Development Corporation :—

his is an undertaking of the Government of Tamil Nadu founded in 1974, to solve the housing problems of the harijans. The initial target has been fixed at the construction of one lakh houses for harijans and members of the ' korava ' community.

The Pudukkottai district, 326 houses have been constructed by the end of October 1975, as detailed below, by this Corporation, at a cost of Rs. 14 lakhs.

<i>Name of the taluk.</i>	<i>Name of the village.</i>	<i>Number of houses constructed</i>
Tirumayam	Karaiyur	48
Do.	Arimalam	80
Alangudi	Alangudi	50
Kulattur	Keeranur	21
Do.	Puliyur	34
Do.	Kunnattur	29
Do.	Rengammal Chatram	41
Pudukkottai	Gandarvakkottai	58
Total		361*

As a second phase of the programme, sanction has been accorded for the construction of 725 houses in the district at a total cost of Rs. 29 lakhs.

There are an Assistant Engineer and a Special Tahsildar with supporting staff to carry on the work of this Corporation in the district. They work under the general supervision of the District Collector.

* 35 houses at Arimalam and Puliyur have not yet been completed.

CHAPTER XIV—LOCAL SELF-GOVERNMENT.

The decades since independence have seen alongside the increase in the administration's role, a simultaneous growth of self-governing institutions. Popularly elected local bodies in villages and towns look after the area's basic requirements.

How has local self-government evolved since the days of the Tondaimans ? What is the structure of panchayat raj in the district ? What has been its impact on rural development ?

Historical Background.

If the ancient Tamil kings were despots, there were several limitations to their despotism. In the absence of a well-organized bureaucracy and quick modes of communication, they could not maintain an ever-lasting grip over their citizens. They relied, therefore, on village assemblies to organize some form of local self-government which, while being loyal and subservient to the central authority, could yet relieve the king from the cares of actual day-to-day administration in his far-flung provinces. N. Subramanian says¹: "The King contacted all parts of the kingdom, probably, only for purposes of revenue collection or putting down serious disorder. Otherwise the people were thrown on their own resources in the matter of management of local affairs. So the people of a village, who could not be in any sense effectively governed by the King all the time, governed themselves through rich, experienced, influential and sufficiently wise men of the locality. These were the rudiments of village autonomy, local self-Government, etc. But it would be wrong to use these latter day expressions to denote primitive institutions".

But soon these pristine institutions developed themselves into autonomous bodies, capable of governing their units of territory, subject to a formal supervision of the King and his officers. Nilakanta Sastri describes² this change: "The villagers met periodically to consider matters of common concern and for the settlement of disputes and the administration of justice. Everywhere rural administration grew from timid and tentative improvisations to

¹ Page 109 of *Sangam Polity* (1966).

² Page 158 of *A History of South India*, (1958).

the more elaborate and complicated machinery of committees and officials that we find described in the Chola inscriptions of the tenth and eleventh centuries, and in this evolution the Tamil country appears to have been more progressive than the rest of South India. The village had a headman, variously called *mutuda*, *kilan*, *grama-bhojaka* and so on, who was its leader and mediator with the royal government. How he was appointed and whether the office was hereditary cannot be determined. The village elders are also particularly mentioned besides the headman and the assembly." He adds¹: "Whenever necessary, there was mutual consultation among these different assemblies and other local associations, and the general rule was to consult all the interests concerned in a matter before a decision was taken on it. The village assembly regulated irrigation rights, administered charitable endowments, maintained tanks and roads and managed the affairs of temples, either directly or by means of executive officers and committees working under it. It also made rules for regulating its own procedure." So for matters of local importance, an organized system of self-governance had developed in Tamil Nadu at the level of village, even more than a thousand years ago. As Jawaharlal Nehru points out² the break-up of self-governing village communities began only under British rule. In his view³, the decay of the group system under British rule, and especially of the self-governing village caused injury to the masses, more psychological than economic. "Nothing positive came in its place", he observes ruefully, "and they lost their spirit of independence, their sense of responsibility, and their capacity to co-operate together for common purposes". The village, he adds, "which used to be an organic and vital unit, became progressively a derelict area, just a collection of mud huts and odd individuals".

An account of the development of local self-government institutions in the Madras Presidency given⁴ by the Administrative Reforms Commission is as follows: "Pre-British India had frequently been described aptly as a land of village republics. As early as the days of the Chola Emperor Prantaka-I, a highly sophisticated

¹ Page 159 of *A History of South India*, (1958).

² Page 246 of *The Discovery of India*, (1947).

³ Page 536 *ibid.*

⁴ Pages 1-3 of the *Report in Panchayat Development Administration*, 1973).

and autonomous system of self-government at the village level was in existence as shown by epigraphic evidence in Uttiramerur, dating back to 921 A.D. These village organisations were managed by villagers elected by a system of drawing lots from among eligible men. They had powers to levy taxes, settle disputes, and administer all local facilities with total autonomy. They constituted various Committees like the Annual Committee (Samvatsara Variyam), Garden Committee (Thotta Variyam), Tank Committee (Eri Variyam), Gold Committee (Pon Variyam), etc., and attended to their responsibilities with great efficiency. The lack of communication facilities and the relative economic self-sufficiency of the villages in the ancient past ensured them great deal of autonomy within the Central Government. Dynastic changes at the centre had little impact on these self-governing village communities which managed to preserve their identity over the centuries. With the advent of the British Rule, under which the powerful Central Government settled directly with the cultivator or an autocratic local Chieftain, village autonomy in India, gradually withered. It was only after 1858 that the British Government started thinking seriously about setting up self-governing local institutions. Lord Mayo's resolution of 1870 and Lord Ripon's resolution of 1882 really led to the creation of the first set of civic bodies. In Madras, however, the Corporation of Madras was created under a Charter from the Crown, dated 29th September 1688. Madras thus had the distinction of having the earliest formed Municipal Corporation in India. The Act XXVI of 1850 authorised municipal towns to be organised largely on the initiative of citizens. The Madras Act VI of 1863, Act III of 1866 and the Madras Local Funds Act (Act IV of 1891) authorised the levy of certain cesses for local improvements such as educational and medical facilities, but did not create elected bodies for the administration of the revenues. The first important enactment on local self-government was the Madras Local Board's Act, 1884. Under this Act small towns and groups of villages were constituted as Unions controlled by Panchayats in which the village headmen were ex-officio members. These Unions were expected to attend to the maintenance of roads, street-lighting and sanitation. Under the same Act, Taluk Board and District Boards were created, with the

Revenue Divisional Officer and the District Collector as Ex-officio Chairman, respectively. The District Boards controlled the Taluk Boards, which in turn exercised authority over the Unions. The Members of all these bodies were nominated, but the Governor-in-Council had the discretion to allow the election of Members in chosen areas. This discretion however was never exercised. By 1897 the Madras Presidency had 361 Unions with 3, 324 Members and 103 Taluk and District Boards with 1,762 Members. The Royal Commission on Decentralisation in 1909, the Montague-Chelmsford Report and the Government of India Resolution of 1918, stressed the need for elected representatives in local bodies. Under the Madras Local Boards Act, 1920 (Act XIV of 1920) and the Madras Village Panchayats Act, 1920 new village panchayats were constituted and all persons above the age of 25 in the locality, were made eligible to vote and elect Panchayat Members. A Registrar-General was appointed to supervise and regulate these Panchayats. The District Boards, Taluk Boards and the Union had larger proportions of elected Members and exercised greater powers of taxation. The Collectors and the Government interfered only in emergencies. By 1928, the number of Village Panchayats swelled to 3,000 and the Registrar-General could not cope with the work. The Government therefore transferred the panchayats to the control of Collectors. In 1930 the Village Panchayats Act of 1920 was repealed by Madras Act XI of 1930 and Panchayats were put on the same footing as Unions and brought under the purview of the Madras Local Boards Act, 1920. Some time later the Unions were converted into Village Panchayats. In 1934 the Government abolished the Taluk Boards since it was felt that there was considerable overlapping of functions between Taluk and District Boards and that there was really no need for two sets of bodies above the village level. The Madras Act XII of 1946 sought to take the Village Panchayats away from the control of District Boards but owing to political changes in the country and the desire to bring in a more comprehensive legislation, the Act was allowed to lapse in 1948."

Post-Merger Organisations-Municipality.—In Pudukkottai, however, the idea of establishing a system of municipal administration originated only during the period of Sashiah Sastri, Diwan and

Diwan-Regent from 1878-1894. In his review of the Report on the Administration of Pudukkottai, Fawcett, the Political Agent observed : " There is one point which I suggested to the Diwan-Regent a few days ago relative to the matter of Town conservancy, that the Town of Pudukkottai ought to pay for its own roads, light and sanitation ; ought in fact to be made a municipality : and he (Diwan Regent) told me he had the same project in view. " But Sashiah Sastri wanted only to regulate what constituted municipal matters and by what agency they were to be managed and what were municipal offences and how they were to be dealt with. He did not have any idea of creating a body of Town Councillors to administer the municipal fund, as was being done in the large towns in British India. He considered the town of Pudukkottai too small for it and the people of the town not sufficiently advanced to agree to any coercive steps for the compulsory scavenging of their backyards. So in the draft regulation framed by him on the lines of the British District Municipalities Act he provided for the creation of a post of Conservancy Officer in lieu of a body or members. But the then Political Agent, Welsh, expressed a view in his letter dated 29th February, 1892, that the municipal fund should not merge with the general revenues and that it should be administered under some organization which would give the people of the localities affected a voice in the management. The Government did not approve this regulation and informed that they would be prepared to consider any well devised scheme which should deal with the Town of Pudukkottai alone and should provide for the establishment of a municipal council and a separate municipal fund. A revised draft regulation sent for the purpose was considered by Andrew, the next Political Agent, to be too elaborate for a town like Pudukkottai and he observed that a less ambitious measure would do. Upon this Sastri's successor, Diwan R. Vedantachari furnished the following statistics relating to the town of Pudukkottai, including the usual suburbs, Tiruvappur and Tirugokarnam :—

1 Extreme length east to west	..	..	..	3 miles.
2 Extreme breadth north to south	..	..	..	2 miles.
3 Terraced houses	..	..	..	234
4 Tiled houses	..	..	..	1,734
5 Thatched houses	..	..	..	1,320
6 Number of streets gravelled	..	..	..	20

7	Number of fair weather streets	..	..	15
8	Number of lanes	..	..	50
9	Breadth of main streets..	..	..	36 feet.
10	Breadth of side streets	..	..	24 feet.
11	Breadth of lanes	..	..	12 feet.
12	Population	..	..	19, 117
13	Number of vehicles as per toll and license	..	..	619
14	Number of animals brought for sale in market	..	..	2,000
15	Number of cremation grounds	..	..	10
16	Number of burial grounds (European, Mahamedan, etc.)	..	..	10
17	Number of drinking water tanks	..	..	13
18	Number of bathing water tanks	..	..	15
19	Number of other tanks	..	..	32
20	Number of lights	..	..	349
21	Number of public cart stands	..	..	2

He pointed out in his memorandum dated 2nd December, 1895, that all municipal matters were regulated by separate regulations, and reiterated the views of Sashiah Sastri that the people of Pudukkottai town were not sufficiently advanced to admit of the British municipality system being introduced at the very outset. He added that the sanitary and other improvements at the capital and in the rural stations are virtually conducted by an official committee. He stated : " The present state of the management of the municipal improvements should continue till the people are sufficiently educated and advanced."

It was only after about 17 years that the position changed. Under Regulation II of 1912, a Municipal Council was constituted in Pudukkottai from 1st April 1912, replacing the Sanitary Board.¹ The new Municipal Council, to begin with, looked after the work of the Sanitary Board only. Gradually, an improved system of

¹ Darbar records, Pudukkottai.

² Paragraphs 101-104 of the Report on the administration of Pudukkottai 1911-12.

management on the lines of municipal administration in British India was introduced. The Council, exclusive of the chairman consisted of eight nominated members, four of whom were officials, and four non-officials. It was reported that "the Darbar watch with interest the new departure in local self-government."

In his speech on the occasion of the Silver Jubilee of his reign, the Raja Martanda Bhairava Tondaiman, told¹ his people (on 22nd February, 1913) : "I am glad to find that the citizens of the capital are beginning to think well of the municipality. I know some of you were inclined to look askance at the municipal taxes ; but it appeared to me unfair that men in the town should enjoy the comforts of a city life and the poor toiling ryot in the far-off villages should pay. It was also my wish that as the people prove themselves fit they should have a progressive voice in the Government. I am now giving the citizens of Pudukkottai town, the privilege of electing two members to the Municipal Council as vacancies occur."

This was the beginning of self-government in Pudukkottai Town. Gradually the direct role of the people in municipal administration increased. In 1945, there were 18 members in the Municipal Council, 14 of whom were elected by the rate-payers of the Municipality and four (three of whom were officials) were nominated. Of the 14 elected Councillors, one was elected by women and one exclusively by Muslims. The other 12 represented 12 wards of the municipality. The chairman was a non-official selected by Government from among the elected members of the Council. There was a system of sewers (though incomplete) discharging into a sewage farm. Thirty-six tanks were there in the town, out of which 13 were conserved for drinking. There was system of a protected water supply with a reservoir and filters. Another tank supplied water through pipes to the western sub-urbs. A well had been sunk in the bed of the Vellaru, from which water was pumped to the Town water-works as a supplemental source of supply. Electric lights had been provided in the streets. Vegetable and meat markets, two slaughter houses, cart stands, a motor bus stand, a park and reading rooms were maintained by the Municipality. The Municipality also maintained a maternity and child-welfare

¹ Page 476 of a General History of the Pudukkottai State (1916).

centre and subsidised the wards for infectious disease in the General Hospital. Municipal by-laws on vital statistics, conservancy, water supply and drainage, prevention of diseases, food control, prohibition and regulation of advertisements in public places, land control, trade control, building control and control of places of public entertainment were in force.

The total income of the municipality for 1943-44 was Rs. 1,73,000 and expenditure was Rs. 1,27,000. The incidence of taxation was Rs. 2 per head of the population. House tax on buildings was levied at four per cent on the annual value and water-tax, drainage tax and lighting tax each at one per cent, on the rental value¹. This at the time of merger, the people of Pudukkottai had been inured in municipal administration. The provisions of the Madras District Municipalities Act, 1920, and the Madras Local Boards Act, 1920, were extended to the former Pudukkottai State area in March, 1949².

Union Panchayats.—The extension of the system of local self-government to the rural areas was, however, approached with extreme hesitation by the Pudukkottai State. The educational backwardness of the village population was considered a major stumbling block. The Village Conservancy Regulation (No. IV of 1909) was the beginning in this direction. Five Union Panchayats, at Annavasal, Karambakkudi, Arimalam, Ponnamaravati and Tirumayam, were formed under this Regulation. Each Panchayat, except that of Ponnamaravati, consisted of seven members, five of whom were elected and two nominated by the Government. The Ponnamaravati Panchayat had nine members (seven elected and two nominated). Each Union Panchayat had a non-official chairman. But these chairmen were merely agents of the Diwan-Peishkar, who was the Head of the Department. House tax, and lease amount for the rights of collecting fees in the weekly and daily markets and in slaughter-houses, were the main sources of income for these Union Panchayats. The State also allotted grants to these Union Panchayats. But excepting village conservancy and drinking water supply these institutions did not perform any important function of local self-government.

¹ Pages 5-7 of a Guide to the Pudukkottai State (1946).

² Tamil Nadu Archives Record, Madras.

Village Panchayats.—K. S. Ramachandra Iyer, a native of Alangudi (Retired Tahsildar of Ramanathapuram District) submitted a memorandum on 22nd March 1918 to the Durbar, along with a draft regulation for the establishment of Panchayat Courts in Pudukkottai State to reduce the expenses of litigation in suits of small value among the people. Though it looked more pertinent to the decentralization of the civil judiciary process, in it was contained the first move to initiate thinking on the constitution of village panchayats in the State. Sidney Burn, the State Superintendent, was very impressed by this and took pains to find out the parallel position in the Cochin State. On 24th March 1918, he observed, "There are in the papers today some laudatory references to the work accomplished by village panchayats in Cochin more particularly in making and repairing roads and in conserving minor irrigation works. If we could get panchayats to look after a lot of the small tanks it would be very useful, relieving the State a lot of trouble, and probably keeping the tanks in better condition....." He was also of the opinion that the panchayats should be self-supporting. Referring to the panchayats in Cochin, he observed on 19th April 1919, ".....It appears they have no powers of taxation but receive grants from the Central Treasury. If that is all, I don't think it is very sound. They ought to have some share in raising of their funds as well as the power to spend them....." But before he could finalise the proposals, he went on leave. Thomas Austin who worked in his place, recorded the papers¹ on 5th September 1919, with the remarks: "I think this will have to wait for some time yet; this may be recorded."

Pudukkottai State had to wait for nearly six years. The Village Panchayat Regulation (No. III) was introduced only in 1925. V. Govindaswamy Naidu was appointed first Registrar of Panchayats. In 1925-26, only three panchayats were formed, at Poovarasangudi, Alangudi and Keelappaty Rasimangalam. It was reported that though a panchayat was constituted at Keeranur also, due to local reasons the election of panchayats was kept in abeyance.

Reporting on the constitution of the Village Panchayats, the Darbar reported²: ".....It is gratifying to see that at least three such panchayats were established in the last fasli. The

¹ Darbar Records, Pudukkottai.

² Report on the Administration of Pudukkottai 1925—26.

Regulation itself became law only in the middle of the year and the people had to be educated on the advantages they could derive from the organization of such panchayats. Some of these panchayats have since the close of the fasli begun to work in earnest and panchayats have recently been established in two rich Nattukkottai Chetti villages, namely, Ramachundrapuram and Rayavaram. In these villages there are a number of substantial and costly buildings, but they are lacking in sanitation and roads and other amenities which an organised body can arrange for. When the advantages of the working of panchayats in those villages are seen, Government hope other nagarathars will readily follow the example."

The Registrar reported on 5th September 1926 : "The scheme itself is new. Having been accustomed for a long time to look upto Government for provision of all sorts of amenities of life and being mostly conservative and highly selfish the people are against any movement that is likely to touch their pockets, however large the benefits they would derive by the adoption of the scheme. Proper education and mutual good understanding only could remove such ideas and infuse in them a desire to better their condition. It is hoped that in the long run they will learn the benefits of their co-operative activities and self-management at least by watching the condition of brethren who have been wise enough to take advantage of the scheme."

But the village panchayats did not make much headway under the State. In 1946-47, there were 40 panchayats out of which only 38 functioned. The number of members in each panchayat varied from seven to eleven. Not less than two thirds of the total number of members in each panchayat were elected. House tax, Profession tax, and encroachment fees formed the mainstay of their revenue. Some panchayats derived revenue from markets, slaughter-houses, cattle pounds and cinema theatres. Having regard to their needs, the Government also made contributions.

The construction and maintenance of village roads and streets, sanitation, drinking water-supply and street-lighting were their main functions. Some panchayats maintained elementary schools and libraries also.

The conservancy of the villages which had no Union or Village Panchayat (they formed the majority) was controlled by the Revenue department.¹

With the introduction of the Madras Local Boards Act, 1920, the Unions and Panchayats constituted before merger, and in existence on 31st March 1949 were deemed to be panchayats constituted under the Madras Local Boards Act, 1920.

Arantangi.—The District Board of Thanjavur had jurisdiction over the entire revenue district of Thanjavur, excluding the municipalities prior to 1932, a single Taluk Board had jurisdiction over Arantangi and Pattukkottai taluks. In 1832, due to the introduction of the Madras Act XI of 1930 to the Madras Local Boards Act of 1920, Arantangi had a separate Taluk Board². But the Taluk Boards were abolished in 1934.

Arantangi was a major panchayat board in the old set-up. There were several other village panchayats in the taluk. The District Boards looked after the formation and maintenance of roads, management of elementary and secondary educational institutions and public libraries, sanitation, maintenance of medical institutions, etc.

In 1946-47, there were 2,190 boys and 1,236 girls getting educated in the elementary schools maintained by the District Board, in Arantangi taluk. There were 39 such schools for boys and 7 schools for girls, teaching above class IV. There were 5 medical relief centres. Arantangi and Avudaiyarkovil, each had a dispensary. Thus Arantangi, as a part of Thanjavur district, shared the institutions of local self-government created in the British India. Though there were also non-panchayat areas, the position in regard to the local self-government in rural areas, was better than the Pudukkottai State.

THE CONTEMPORARY STRUCTURE,

Pudukkottai Town-Municipality.—With 36 years of experience in managing municipal affairs behind them, the people of Pudukkottai had no great difficulty, on merger, in fitting it in the general structure

¹ Report on the Administration of Pudukkottai (1946-47).

² Page 219 of *Tanjore District Gazetteer*, Vol. II (1933).

of municipal administration in the Madras Province. But several things had to be done to bring the municipality on par with other municipalities. The rate of taxation was very low and the financial condition of the council was bad. The income and expenditure of the council for 1946-47 and 1947-48 showed deficits.

<i>Year.</i>	<i>Income.</i>	<i>Expenditure.</i>	<i>Deficit.</i>
(1)	(2)	(3)	(4)
1946-47	2,01,951	2,33,392	31,441
1947-48	2,34,880	2,46,465	11,585

V.N. Kudva, then First Member, Board of Revenue, Madras, reported¹ on 11th March, 1948 : "The Municipality is controlled by the Darbar and the Diwan Peishkar controls the Unions and the Panchayats. The Unions and the Panchayats are said to be working satisfactorily. The income of the municipality is Rs. 2.25 lakhs, out of which about Rupees one lakh is spent on establishment. The rates of taxation are very low as compared with those which prevail in similar Municipalities. Very few amenities are provided and they consist of street lighting, scavenging, sweeping and water-supply. They more or less correspond to those provided for in Unions and Village Panchayats. It ought to be possible to increase the scale of taxation and a Commissioner has to be appointed to carry on its executive work."

Immediately after merger, local officers were exercising powers under State laws in respect of the local bodies. A Special Deputy Collector functioned as supervisory authority over the Municipal Council, subject to general control by the Inspector of Municipal Councils and Local Boards. From 1st April 1949, the Inspector of Municipal Councils and Local Boards, Deputy Inspector of Municipal Councils and Local Boards, and the Collector of Tiruchirappalli became supervisory authorities. As the income of the municipality was just over Rs. 2 lakhs, it was placed in Grade II₁ in the first instance and then upgraded to Grade II.

¹ Tamil Nadu Archives Records, Madras.

In 1958, the Pudukkottai Municipality passed a resolution requesting an upgradation to Grade I. But, the Regional Inspector of Municipal Councils and Local Boards, Tiruchirappalli pointed out that the average ordinary annual income of the Municipality had not exceeded Rs. 6 lakhs for three years, which was one of the stipulated conditions for such an upgrading. He also reported that the general financial condition of the municipality was not satisfactory. Accounts for lighting, water supply, drainage, etc., were showing a deficit, resulting in a heavy drain on general funds. The rates of taxation levied by the municipality were very low. The proposals for upgrading were not therefore, approved by the Government and the municipality was advised in 1958 to augment its financial resources¹.

The following particulars may reveal the somewhat increasing trend in the role played by the Pudukkottai Municipality after merger :—

	1957-58 ²	1964-65 ³
1. Total receipts	Rs. 5,06,087	8,80,673
2. Total ordinary expenditure. Rs.	3,21,155	5,53,684
3. Amount of receipts from Rs. 207 the municipal rest-house.		7,063
4. Total mileage of roads maintained.	65	65
5. Expenditure on mainten- Rs. ance of roads.	46,478	72,555
6. Number of elementary schools maintained.	13	13
7. Total strength in the schools.	2,959	4,058
8. Number of out-patients treated in the <i>Siddha</i> dispensary and a part- time dispensary main- tained.	38,184	54,709
9. Number of successful vaccinations per mill of the population.	94	453

¹ Tamil Nadu Archives Records, Madras.

² *Ibid.*

³ *Ibid.*

	1957-58	1964-65
10. Quantity of water supplied per head per diem.	6 (gallons)	19.2 (litres)
11. Total number of houses.	7,485	8,083
12. Number of houses provided with latrines.	4,160	5,180
13. Number of high power lights provided.	111	578
14. Number of electric lights provided.	1,276	1,266

The Pudukkottai Municipality was upgraded to Grade I Municipality from the 1st November, 1963.

At present (in 1974-75) the Pudukkottai Municipality has 30 wards covering an extent of 12.95 square k.ms. The Town's population is 66,388 (1971 census). The present strength of the Municipal Council is 30 members including the Chairman and Vice-Chairman. The wards 4 and 15 have been reserved for women and scheduled castes respectively. 47 meetings took place in 1974-75 out of which 4 were postponed. The attendance of members was 61 per cent. 1,846 subjects were decided in this year. There are five permanent committees for Tax, Education, Town Planning, the Vijaya Raghunatha poor Home, and Finance. The total receipts of the Municipality for this year was Rs. 16,85,946 and the total expenditure was Rs. 13,08,263. The expenditure on staff was Rs. 2,17,787 as against Rs. 2,34,059 in the last years.

The details of the roads maintained by the Municipality are furnished below :

	1973-74	1974-75
	K. Ms.	K. Ms.
(i) Black-topped	49.297	51.774
(ii) Gravelled	6.233	5.336
(iii) Cements	0.829	0.829
(iv) <i>Saralai</i>	31.440	29.860
(v) Highways	16.308	16.308
Total ..	104.107	104.107

The expenditure on the maintenance of roads was Rs. 42,891.

The Satyamurthi Rest House gave an income of Rs. 2,96,097 during this year, of which Rs. 12,919 were spent on its maintenance.

The details of lights provided by the Municipality are as follows :

(i) 250 W <i>Rasayayu</i> lights	..	..	..	..	2
(ii) 40 W 4' single-tube lights	..	..	..	..	165
(iii) 40 W 4' double-tube lights	..	..	..	..	849
(iv) 20 W 2' double-tube lights	..	..	..	..	159
(v) 40 W ordinary lights	..	..	..	..	1,006

The compulsory elementary education scheme has not been implemented in the municipal area. But the percentage of school-going children is 97.3. As against 12,058 children of the school-going age are group, 11,732 go to school. The Municipality maintains, 16 schools, which have a strength of 6,552 pupils. 471 pupils however, come from outside the municipal limit. There are 175 teachers in the municipal schools. The Municipality has spent Rs. 10,500 on providing mid-day meals to the children. It has incurred totally an expenditure of Rs. 104 for each student in its schools during 1974-75. Four Reading-rooms are maintained by the Municipality in the Town Hall Building, Tirugokarnam Gandhi Park, Chinnappa Park and Municipal Office. The Municipality maintains four playing grounds for children in Thilagar Thidal, Chinnappa Park, Pichathanpatti Park and Ponnappan Oorani Park.

There is a *siddha* dispensary maintained by the Municipality in which 51,092 persons got treatment as out-patients during this year, 1974-75 as against 44,072 persons in the last year. There is also a part-time municipal dispensary on the Ayyarkulam-bund which functions on Tuesdays, Thursdays and Saturdays. 11,882 patients got treatment here during the year. There are also eight maternity wards maintained by the Municipality.

The Municipality has a grass-farm since 1958, with an extent of 43 acres. Receipts from this farm during the year were Rs. 1,29,374.

Protected water supply is provided by the Municipality from the Vellaru, four miles away from Pudukkottai. A 45 horse-power engine is used to pump the water from the infiltration-gallery to an

over-head-tank that has a capacity of one lakh gallons. There is also a ground level reservoir of 2,37,500 gallons. The town is divided into low level and high level zones, for the purpose of water supply. There are 1,179 residential connections and 5 non-residential connections.

Out of 10,342 residential houses in the town, only 6,172 houses have the facility of latrine.

Drainage is available only in the eastern part of the town, an extent of 1.67 square miles. An estimate for Rs. 1 crore has been prepared for extending this to the other part also. The length of the existing drains is 21.11 Kms.

The Municipality runs a weekly shandy and 3 daily markets in the town.

With the increase in bus-traffic the present bus-stand has become rather congested. There is a proposal to form a new bus-stand in Kattupudukulam in Satyamurthi road.

The Municipality maintains eight parks and two slaughter-houses. The amount spent on parks during the year was Rs. 38,063. There is also a fruit-garden which gave a revenue of Rs. 845 to the Municipality in the year.

The Town had undergone a survey even before the merger. A resurvey and settlement has also been completed in 1969-70.

The Vijaya Ragunatha Poor Home is maintained from the interest received from Rs. 1,39,700 invested in Central Government securities and a permanent security deposit of Rs. 40,000 in the Madurai Bank. In 1974-75, 34 students lived in this institution.

Rural areas : District Development Council.—The Constitution of India has envisaged the creation of village panchayats as autonomous units of local self-government. The follow-up measures taken by the Government of Tamil Nadu in pursuance of this are narrated¹ by the Administrative Reforms Committee : „In pursuance of this objective, Madras Village Panchayats Act

¹ Report on Panchayat Development Administration (1973).

of 1950 was enacted constituting a Panchayat for each village with a population of 500 and above, with elected members and with a detailed list of civic functions, to be handled by them. District Boards had no control over these Panchayats which were administered through the Inspector or Local Board.

During the period between 1950 and 1958, historically important changes took place in the development of rural areas. National Extension Services and Community Development Projects were organised to cover every part of India. Community Development Blocks were constituted at the rate of 66,000 to 1,00,000 people per block. An integrated development of the community as a whole, covering its social, economic and cultural needs, was sought to be implemented through the National Extension Services and Community Development Programme. Under these schemes a horizontally co-ordinated team of development officers functioned at the block level. The Balwantrai Mehta Committee on Democratic Decentralisation (1957) advocated the integration of the Community Development set-up with a popularly elected Panchayat Samity to bring about local participation in Development activities.

The Madras Panchayats Act, 1958, was thus enacted, constituting Panchayats at the village-level and Panchayat Unions at the Block-level. The Panchayat Union is conceived of as a federation of Village Panchayats, with the elected Presidents of Panchayats sitting as Members of the Panchayat Union Council and electing one from among themselves as its Chairman. The District Boards were abolished and in their place advisory bodies called District Development Councils, were brought into existence. The most significant change brought about by the Madras Panchayats Act 1958 was the entrustment of production functions to the elected local bodies which till then were performing only municipal functions. The entrustment of such production functions as agriculture, animal husbandry, co-operation, irrigation, village industries, etc., to these bodies necessitated the appointment of various categories of technical staff to serve them. This change called for skilful exercise in administrative co-ordination amongst the various disciplines involved, by District Collectors and Revenue Divisional

Officers who had acquired the necessary expertise for such exercise while implementing Firka Development Schemes and Community Development Schemes“.

Thus it may be seen that the District Development Councils came to play a more dynamic role in the place of the erstwhile District Boards. When, in consultation with the District Planning Board, the Collector of Thanjavur recommended on 7th November, 1958 the formation of two District Development Councils, one for Thanjavur West and another for Thanjavur East, Aranthangi taluk became part of Thanjavur West Development District. Similarly Tiruchirappalli district was also bifurcated and Pudukkottai division become part of Tiruchirappalli South Development District. The Government notified the areas of the District Development Councils. The Madras District Development Councils Act, 1958 was brought in to force with effect from 1st December 1959¹. The District Development Councils were formally brought into existence from 1st January 1960. After the formation of the Pudukkottai district, the areas have been renotified, statutorily bringing the transferred areas in the Thanjavur West and Tiruchirappalli South Development Districts, to the Pudukkottai District.

Since all the developmental activities had begun to be governed by the national Plans, the need was felt for better co-ordination among the different departmental agencies of the Government and the local bodies. It was also found necessary to associate the representatives of the local people in the formulation of developmental programmes. There were the District Planning Boards, Block Advisory Committees and several *ad hoc* Advisory Committees doing this work. This resulted in duplication of work and an inadequate representation of the local authorities. The District Development Councils have changed the system for better by giving representation to all the Panchayat Unions and Municipalities in one body, and functioning as a reflector of the wishes of the local people.

The District Collector is the ex-officio Chairman of the District Development Council. The composition of the District Development Council is as follows :—

(i) The District Collector, Ex-officio Chairman.

¹ Tamil Nadu Archives Records, Madras.

(ii) Elected Members of the House of the people and elected Members of the State Legislative Assembly chosen to represent a constituency which consists of or comprises or relates to the district or any portion thereof or who reside in the district.

(iii) Elected Members of Council of States representing the State of Tamil Nadu and elected Members of the State Legislative Council.

(iv) Nominated Members of the Parliament of this State and of the State Legislature, who have intimated their desire to serve as Members of the District Development Council.

(v) All Chairmen of Panchayat Union Councils in the district.

(vi) All Chairmen of Municipal Councils in the district.

(vii) Presidents of the Co-operative Central Banks in the district.

(viii) Such Gazetted Officers of the Government connected with planning and execution of development schemes in the district as are nominated by the Government.

In addition to the members referred to above, the Chairman of the Tamil Nadu State Bhoodan Yagna Board, any official of the Tamil Nadu Electricity Board, Tamil Nadu Water Supply and Drainage Board or any other Board or Committee constituted under any law for the time being in force nominated by the Government and the President of a Town Panchayat in the district nominated by the Collector in rotation are also the members of the District Development Council.

The District Development Councils, however, do not have any executive or legislative functions.

Panchayats and Panchayat Unions.—The implementation of the Madras Panchayats Act, 1952, involved three main administrative operations which may be distinguished from one another as (i) completion of panchayat coverage; (ii) Panchayat Union Constitution; and (iii) Rural Development Devolution.

The first operation, "completion of panchayat coverage" commenced on 1st January 1960 in all the blocks and was completed on or before 31st December 1960. With the completion of this operation, all the rural areas in the then Madras State were covered with panchayats.

The administrative operation referred to as "Panchayat Union Constitution" began when the preliminary notification was published by Government under sub-section (1) of section 7 of the Act, specifying the blocks where Panchayat Unions were proposed to be constituted.

Consequently the Panchayats were constituted in all the non-panchayat areas and the Panchayat Union Councils were formed.

Two Panchayat Unions, at Arantangi and Avudankoil, were formed in Arantangi taluk. There were eight Panchayat Unions in the old Pudukkottai revenue division at Tiruvarangulam, Karambakkudi, Keeranur, Annavasal, Viralimalai, Tirumayam Pannamaravati and Arimalam. The Pudukkottai Revenue District was constituted under the provisions of the Tamil Nadu District Limits Act, 1865 with effect from 14th January 1974 and the Panchayat Development District was constituted under the provisions of the Tamil Nadu District Development Councils Act, 1958 with effect from 17th June 1974. With the formation of the Pudukkottai district, the following changes were ordered by the Government of Tamil Nadu :—

(i) 5 villages from the Thanjavur Panchayat Union, 30 villages from Tiruvonam Panchayat Union and 23 villages from the Peravurani Panchayat Union were transferred to the Tiruvarangulam Panchayat Union.

(ii) 7 villages from the Sethubavachatram Panchayat Union were transferred to Arantangi Panchayat Union.

There is also a proposal to bifurcate the Tiruvarangulam Panchayat Union, which has become more unwieldy due to the inclusion of the transferred area.

So there are ten Panchayat Unions in the Pudukkottai district now. The Pudukkottai district now has 491 Panchayats as detailed below:—

	<i>Number of Panchayats.</i>
(i) Tirumayam taluk	108
(ii) Alangudi taluk	87
(iii) Arantangi taluk	114
(iv) Kolattur taluk	127
(v) Pudukkottai taluk	55

The following details would show the achievements of the Panchayat Union as on 31st March 1975 :—

(i) The length of roads maintained	2,450 K. Ms.
(ii) Drinking water wells constructed ..	2,286
(iii) Overhead tanks and automatic pressure tanks constructed.	138
(iv) Primary Health Centres established ..	11
(v) Buildings constructed for the Primary Health Centres.	8
(vi) Maternity and Child Welfare Centres established.	72
(vii) Veterinary Dispensaries established ..	12
(viii) Buildings constructed for Veterinary Dispensaries.	9
(ix) Agricultural Depots (Main and Sub) opened.	19
(x) Panchayat Union Schools maintained ..	963
(xi) Buildings provided for schools	768

(xii) Women teachers' quarters constructed ..	44
(xiii) Radios distributed to Panchayats ..	1,554
(xiv) Family Planning operations conducted (from 1967 to 1975).	4,788
(xv) Treatment in eye-camps—	
(a) Out-patients treated	3,415
(b) Cataract operations	519
(c) Refractions	380
(xvi) Value of work done in drought relief (in lakh rupees).	24.2
(xvii) Employment generated under Rural Works programme and Crash Scheme for Rural Employment (man-days in lakhs).	2.5

Panchayat Unions are the Government's agency for the implementation of developmental schemes at the block or Panchayat Union level.

The following are the details of population as gathered in the Census of India, 1971 of the Village Panchayats, Town Panchayats and Panchayat Unions in the Pudukkottai district :—

	<i>In Pudukkottai district.</i>	<i>In Tamil Nadu.</i>
(1)	(2)	(3)
(a) Average population of Village Panchayats.	1,641	2,087
(b) Average population of Town Panchayats.	8,007	10,040
(c) Average population of Panchayat Unions.	88,098	86,096

The details of population in the Panchayat Unions are as follows:—

Karambakudi—63,032; Tiruvarangulam—1,96,627; Annavasal—81,855; Keeranur (Kunrandarkovil)—56,331; Viralimalai—76,627; Arimalam—59,968; Ponnamaravati—76,560; Tirumayam—60,915; Arantangi—1,34,224; Avudayarkovil—74,837. There are now ten town panchayats in the district.

TOWN AND COUNTRY

Urban population in the district.—Another significant responsibility of local bodies is the direction of urban growth. G. Dattatri, Senior Planner of the Madras Metropolitan Development Authority, in a note for the Pudukkottai District Gazetteer, has analysed the district's urban aspect. His observations are given below:—

Pudukkottai district is one of the least urbanised districts of Tamil Nadu. Out of a total of 9,47,351 persons in the districts 1,14,979 or only 12.1 per cent live in areas classified as urban and the rest 87.9 per cent live in rural areas. The rural population is comprised in 763 villages of which only 13 have a population of over 5,000 each while 295 have a population between 1,000 and 5,000. Pudukkottai town alone accounts for more than 50 per cent of the urban population of the district, the rest being distributed in Alan gudi (6,728), Kulattur (7,222), Tirumayam (18,295) and Arantangi (16,350). It will thus be seen that Pudukkottai is the only important town in the district. This is mainly due to historic reasons. Since the town was the capital of the erstwhile Pudukkottai State, the rest of the State acted merely as a rural hinterland for the town which had all the urban facilities. This trend has continued even after 1948 when the State merged with Tamil Nadu. It will be interesting to observe that during 1961-71 the urban population of the district increased from 95,158 to 1,14,979, an increase of 19,821 persons and more than half of it—15,896 persons was accounted for in Pudukkottai town itself. It had in 1971 a population of 66,384. It is the only town in the district with municipal status. Table I Shows the distribution of urban and rural population in the district according to 1971 census.

TABLE I
Pudukkottai District—Population—Rural and Urban distribution.

Taluk.	Total population.	No. of Villages.	No. of Towns.	Population in towns.	No. of villages having population of more than 5000.	No. of villages having population of more than 1000 below 5000.	No. of villages having population of less than 1000.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Arantangi ..	2,08,961	81	1	16,350	3	53	25
Alangudi ..	1,61,441	253	1	6,728	3	55	195
Pudukkottai ..	1,64,602	122	1	66,384	..	45	77
Tirumayam ..	1,97,443	147	3	18,295	5	60	82
Kolattur ..	2,14,904	160	1	7,222	2	82	76
Total ..	9,47,351	763	7	1,14,979	13	295	455



Pudukkottai Town Today.—The population of the town has been steadily growing¹. From a population of 34,188 in 1941, It increased to 44,527 in 1951, to 50,488 in 1961 and to 66,384 in 1971. Table 2 gives the growth of population of the town since 1881.

TABLE 2.

Pudukkottai Town—Growth of population².

<i>Year.</i>	<i>Population.</i>	<i>Percentage decade variation.</i>
(1)	(2)	(3)
1881	15,384	—
1891	16,885	+ 9.75
1901	20,347	+ 20.50
1911	26,850	+ 31.96
1921	26,101	(—) 2.79
1931	28,776	+ 10.25
1941	34,188	+ 18.81
1951	44,527	+ 30.24
1961	50,428	+ 13.39
1971	66,384	+ 31.48

The municipal limits encompass about 5 square miles (1233.35 hectares) out of which the developed area is about 2.84 square miles (737.64 hectares). Most of the population and developments are concentrated in the town proper by which is meant the area surrounding the old Fort enclosed by North 4th Street, East 4th Street, Satyamurthi road and Sashiah Sastri road. The other inhabited areas are Rajagopalapuram near railway station (Part of ward 23 and 24) 'Maharajapuram (Part of ward 25 and 26)' Tirugokarnam (comprised in wards 15, 16 and 22) and Ganeshnagar (ward 3). The latter are mostly residential areas and depend upon the main town for all urban services. Table 3 gives the extent and population of these divisions.

¹ The evolution of the town since its founding has been dealt with in Chapter XIX.

² Source Census of India Reports.

TABLE 3.

Pudukkottai town—Distribution of population.

<i>Serial number and division.</i>	<i>Wards comprised.</i>	<i>Extent in hectares.</i>	<i>Population.</i>
(1)	(2)	(3)	(4)
1. Main Town	1, 2, 4 to 14 17 to 21 and 30.	422.0	40,594
2. Ganeshnagar	3	78.0	3,118
3. Rajagopalapuram ..	23 and 24	261.0	4,340
4. Saurashtra Street and Maharajapuram.	25 and 26	116.0	3,689
5. Kovilpatti and Tirugo- karnam.	27 to 29	128.0	5,878
6. Gandhinagar	15, 16 and 22.	229.0	8,759
Total ..		1,234.0	66,378



கருமேவ ஜயம்

The main town is the oldest part and containing residential, commercial, industrial and institutional uses. The Thanjavur—Tirumayam road and Annavasal road—Aranthangi road intersect at right and in the Southern part of the area and the other roads are parallel to these roads and form a grid-iron pattern with the old fort in the centre. The streets are wide but the area is closely built up. The old palace, the municipal office and the area around it form the core of the town and contain most of the town level facilities, such as shopping, medical and educational institutions and offices and firms. East Rajavidi is the busy commercial centre of the Town. The weekly market, sports grounds, the public offices and the college are on the periphery of this core area. This area also contains a good amount of residential area and most of the service industries, besides the famed Santhanathaswamy temple and Sivanganga tank.

Population Density.—The population density here varies from 100 persons per hectare to 300 persons per hectare. Wards 13 and 19 have a density of over 300 persons per hectare and the majority of the other wards around it have a density of between 100 to 200 persons per hectare.

All the main roads here have heavy movement of traffic specially the Thanjavur Road and South Main Street.

Suburbs.—Rajagopalapuram lies close to the railway station and the Saurashtra Big Street area, Maharajapuram and its extension northwards including Tirugokarnam form a linear development up to Kovilpatti and are mainly residential areas. The new palace occupied by the Pudukkottai Rajas and now occupied by Government Offices links this area with the Town.

Ganeshapuram is an extension of the main town towards north east and Gandhinagar an extension on the south-east are mainly inhabited by economically weaker section of society.

The municipal limits of the town are bounded by the Kasba forest on the north, dry lands in the south-east, wet lands on the south and wet and waste lands on the west.

Land uses in Pudukkottai Town.—Table 4 gives the land uses under the main categories in the entire municipal area as in 1973.

TABLE 4.

Pudukkottai Town—Land Use 1973.¹

<i>Serial number and Land Use.</i>	<i>Extent in hectares.</i>	<i>Percentage to developed area.</i>	<i>Percentage to Municipal area.</i>
(1)	(2)	(3)	(4)
1. Total area of town ..	1,233.50	..	..
2. Developed area ..	7,327.67	..	59.79
3. Residential	327.30	44.44	26.52
4. Commercial	30.87	4.18	2.50
5. Industrial	18.37	2.48	1.49

¹Source Directorate of Town Planning, 1963.

<i>Serial number and Land Use.</i>	<i>Extent in hectares.</i>	<i>Percentage to develop- ed area.</i>	<i>Percentage to Muni- cipal area.</i>
(1)	(2)	(3)	(4)
6. Roads and Railway ..	125.05	16.93	10.15
7. Public and Semi-Public Uses.	53.55	7.94	4.75
8. Parks and Playfields	12.12	1.64	0.98
9. Utilities and Services	99.70	13.50	8.08
10. Burial Ground ..	3.04	0.41	0.25
11. Vacant Plots	62.67	8.48	5.07
12. Non-Urban Uses ..	490.83	..	40.21
13. Agriculture and Forest	294.56	23.92	..
14. Quarries	33.32	2.70	..
15. Water Bodies ..	113.34	9.20	..
16. Other Vacant Lands	49.61	4.39	..

Residential Characteristics.—According to 1971 Census there are 11,006 Census houses as against 12,847 households. Of these about, 8,500 are residences and about 2,700 are shops, work shops and other categories. Nearly 800 houses were vacant at the time of the Census.

The number of persons per household in the town is 5.16. Of the 8,500 residences 40 per cent or 3,400 were 'Kutchra' and 5,100. were 'Pukka' houses.

About 60 per cent of the households viz., 7,700 households live in one-roomed houses and 3,100 households live in two-roomed houses and the balance of about 2,050 only live in houses with more rooms. Less than half the number of residences are electrified and only very few houses have flushout latrines. About 1,400 houses have water-supply connections. According to a recent study only 20 per cent of the households have a reasonable level of housing facilities, and a majority of these reside in the town proper.

Economic Activity.—About 17,100 persons or 25 per cent of the population are workers. While 45 per cent of the male population are working, only 5·3 per cent of the females are workers. The percentage of workers in the different categories are given below :—

	PER CENT.
1. Trade and Commerce	31·4
2. Manufacturing	18·5
3. Household Industries	2·4
4. Transport	13·7
5. Services	24·9
6. Agriculture	5·7

Trade and Commerce.—The main commercial area is located in the main town along Rajaveedi—South Main Street and East Main Street. The weekly market is located on the west of the town in Santhaipettai and it attracts large crowds from the surrounding region every Friday.

There are about 2,000 commercial establishments in the town. About 64 per cent of these are retail shops, 23 per cent offices, 6 per cent commercial firms and 6·3 per cent wholesale shops and godowns. There are 530 shops dealing in food-grains, 223 hotels and tea stalls, 79 financial institutions, 210 special commodity shops, 11 drug stores and 3 cinema theatres.

The main item of trade is the export of tobacco, sweets and soap.

Industry.—The town does not have any major industry. There are about 184 industrial establishments of which 160 are of the service type, 17 may be classified as light industries and the rest 7 as medium industries. Manufacutring industries dealing in food and beverage number 61 followed by transport equipment (46) machinery (22) printing (19) chemical products (9) and rubber and metallic products (7 each). There are two match factories. Most of the industries are located in and around the main town itself.

Surprisingly, the town has very little employment in household industries—only 414 persons are engaged in such occupations—although at one time the town was famous for silk weaving.

Transport and Communications.—Most of the land use in this category is by roads and the railways. The town has a total length of 104 kms. of roads. The railway passes along one edge of the town and therefore accounts for only a small portion of the area under transportation. The main bus stand is located in the southern part of the Thanjavur Road. The town is a regional transport centre lying as it does between Thanjavur and Madurai. The most heavily trafficked roads are the Alangudi-Annavaasal (South 4th street) road, Tiruchi-Thanjavur (north Main street) road, Thanjavur-Tirumayam road (east main street) and Tirumayam-Tiruchi road.

Services.—The town has traditionally been a centre of administration. It has now as many as 85 Government and Quasi Government offices.

It has 17 elementary schools, 13 higher elementary schools and 6 high schools with enrollments of 5,840, 7,200 and 4,380 pupils respectively. There are two colleges one for women (950) and the other for men (1,800).

There are 46 medical institutions including the two Government hospitals with a total bed strength of 170. The total number of beds available in all institutions is of the order of 250. Most of the public offices, educational institutions and medical institutions are located in the main town or just on its periphery. The public Office, The Raja's College and the Girls high school are on the south of the town while the collector's office, veterinary hospital and museum are in the western part of the town.

Parks and Open Spaces.—The town which was once famous for its gardens has today very little area under parks and open spaces. The main parks (Akkachiyammankulam Park and Gandhi Park) together occupy 3.3 hectares. The four public playgrounds together occupy about 2 hectares. There are a few other open spaces distributed over the entire town.

Utilities and Services.—A large part of the land under this head is under tanks or ponds.

Water is supplied to the town from the reservoirs at Vandipatti, Machuvadi, Adappankulam water works, Pudukkulam tank and from Vellar river. There are 900 house connections and 206 street taps. The water supplied is about 15 gallons/capita.

Sewerage.—The eastern part of the main town is provided with a partial drainage system. The sewerage is led on to the grass farm at Maruppini.

Power.—The town gets electric power from the State grid. The consumption per month (June 1971) is about 3 million units, 30 per cent of which is for domestic use, 27.5 per cent for commercial uses and 29 per cent for industrial uses.

Population projection and Future needs.—The trends in growth of population indicate that the town will have a population of about 90,000 by 1991, an increase of approximately 40 per cent over the present population. To provide for the backlogs in the various sectors and to provide for the future population requirements urbanising another 1,350 hectares would be called for. A large part of the future urbanisable areas are already covered by the nine town planning schemes of which only one is sanctioned.

Concerted efforts are necessary to provide for the present and future population a convenient and healthy environment to live and work. It is gratifying that the Government have already taken steps to ensure orderly planning of this area by notifying the municipal Council as the Local Planning Authority under the comprehensive Town and Country Planning Act of 1971. The Directorate of Town and Country Planning has prepared the draft Master Plan for the Town (from which most of the particulars presented in this section have been taken) and this plan is being forwarded to the newly constituted local planning authority, for publication and implementation.

CHAPTER XV—EDUCATION.

“It is very difficult” wrote Sashiah Sastri, Diwan of Pudukkottai, in the year 1880, “to persuade” the ryot parents to take their boys from the plough or the sheep-fold, to put them into school there to be taught such unknown and unintelligible things as geography, history or hygiene. Difficult as this has been Pudukkottai has yet been able to spread education among its people. It has come a long way from the days of the old *pial* schools. Initiatives taken by the Tondaimans, especially at Sashiah Sastri’s behest, have been followed up by a mushrooming of primary, middle and high schools in the area where the three ‘R’s are taught to the district’s children enabling them to exercise a choice, at the appropriate time, between a life on the farm or the prosecution of technical or higher education in colleges.

Historical Background.

Growth.

Pial Schools.—Until about the end of the eighteenth century, the only education being consciously ‘imparted’ to students in Pudukkottai villages, as in the rest of the Tamil land, was in *pial* schools. These were tiny gatherings of young boys (girls not being supposed to need learning) on the *pial* or verandah of the house of the village priest. After his duties to the temple were over, this priest would settle down to transmit parts of his learning to the boys thus gathered in his house or under the shade of a tree. The priest was, invariably, a brahmin—a descendant of one of the early brahmins who had been given lands in Pudukkottai to settle in, by local chieftains, mainly for *dharmic* and *karmic* considerations, or, less often, out of love of learning. The instruction given was in meta-physical primaries, and through the medium of Sanskrit and Tamil. Not surprisingly, most of the boy-students were also brahmin. Those from the so-called ‘lower’ strata would be too busy with their fathers in the field to study and, in any case, were not then expected to dabble in the secrets of the ‘twice-born’.

Macaulay and Darbar Initiatives.—The first educational institution to be opened officially in Pudukkottai was a charity school inaugurated in 1813 by the Raja Vijaya Raghunatha Tondaiman, at which students were taught free. The education provided in this school was still vernacular in style and oriental in spirit—an offspring of the *pial* tradition.

In 1823 Raja Rammohun Roy protested, in a letter to the Governor General, against the “establishment of a Sanskrit school under Hindu Pandits” to impart such knowledge as was already current. Such a seminary could only be expected to impart grammatical niceties and metaphysical distinctions of little or no practical use to society. “The Sanskrit system of education” he warned “would be the best calculated to keep this country in darkness.” While Rammohun Roy thus opened Sanskrit education to debate, an official discussion of a like nature arose on the medium of instruction in the Arabic College, Calcutta. It was in this context that Macaulay, Law Member in the Governor General’s Council, wrote (1835) his now famous Minute on education.

The order that followed this Minute directed that funds “be henceforth employed in imparting to the native population knowledge of English literature and science through the medium of the English language.”¹ With this decision a revolutionary change of direction was given to literacy in India. Education and learning had hitherto been the preserve of a very thin upper crust of Hindus. The permeation was greater among the Muslims with their religious core being elitist. With the entry of English, education now became—at least technically—available to all takers. A spurt in educational activity is to be seen taking place thereafter.

The Indian Missionary Society, Madras, entered the field of education in Pudukkottai, establishing by 1848, thirteen schools in the erstwhile State’s territories.

The years 1857, 1875 and 1876 saw English or Anglo-Vernacular schools being set up in Pudukkottai town, Tirugokarnam and the taluk headquarters. A girl’s school was opened in Pudukkottai town in 1883 with 13 pupils. Within a year, the strength of this school grew to 62. The Mission School in the town was raised to the status of a Lower Secondary School in 1884.

¹ Resolution of March 7, 1835.

A characteristic school of this type was that run at Pudukkottai town by Baliah. One of its former students, K. Nagarajan,¹ describes life in this 'advanced' *pial* school thus :

"I had my early schooling at Baliah's in the street which was once the town's Cornmarket but is now a row of houses. Baliah was a character in his day, and his day began in the last quarter of the last century and ended in the second half of this, when his son took over. Baliah had to make his way in the world—a world in which the openings were few—and he made it by way of an elementary school. The school could not have been more elementary in construction and equipment, just and walls, cowdung-washed floors and an exiguous verandah. My first recollection of Baliah—or, to give him his full name, Balakrishna Aiyar—is of a formidable person, tall and big-made, at sight of whom I, like all his pupils, shrank visibly. I do not remember his ever teaching us anything. He was just a Presence, at whose appearance all chattering ceased. Admission to school was an important event, an event for which, the calendar had to be consulted and an auspicious day fixed based on the reigning star of the day and its relation to the star under which the pupil was born. It was the most important landmark in a lad's life, after the christening and the ear-boring. A suitable day fixed, a gathering of friends and relations took place. The boy was dressed in his best, silk and silver-lace : he wore a gold chain round his neck, and a pair of gold bangles on his wrists. The family priest was in attendance and directed the ceremonies. The god Ganesa, the remover of obstacles, was propitiated to ensure that the ceremonies went off without a hitch and the boy's educational career ran on the prescribed lines. It was then Baliah's turn. He took the chair, so as to speak, that is, a place by the side of the prospective pupil, on the floor, cowdung-washed and decorated with the geometrical patterns drawn with rice-meal. He then took hold of the pupil's index finger and guided it on a layer of fine sand spread in front tracing the letters of the alphabet in Sanskrit, Tamil and English, in that

¹ K. Nagarajan who is better known in Pudukkottai as Nagaraja Aiyar, was Government pleader in the Pudukkottai State and after its merger with the Indian Union, public prosecutor. He has written two novels *Athavar House* and *The Chronicles of Kedaram*, and many short stories, published in *The Hindu* and *The Mail of Madras*. He is 82.

The Nagarajan's quotations in this chapter are from his unpublished memoirs

order. Sanskrit, because it was the language of the gods, English, because it was the language of men who were almost gods and Tamil because it was the language which we had imbibed with our mother's milk.

Baliah represented a modern edition of the old priest-cum-teacher and his students, the old group of vedic pupils with top-knots and sacred threads. Home, town, school formed an integral whole, even until the second half of this century, in Pudukkottai."

In 1886 a school for Muslims was opened in Pudukkottai town, teaching Arabic and giving lessons in the Kuran, apart from the usual subjects.

Despite these developments, education did not reach the State's majority. Brahmin boys and the children of officials alone seemed to benefit. The Diwan of Pudukkottai, Sir A.Sashiah Sastri, wrote in 1880: "...it is very difficult to persuade the ryot parents to take their boys from the sheep-fold, to put them into school, there to be taught such unknown and unintelligible things as Geography, History, or Hygeine. It requires, therefore, a great deal of coaxing and takes a long time for a change to come over them in the matter".

Consequently, a conference of experts met in 1907 to enquire into the causes for the slow progress of education in Pudukkottai, as a result of which a large number of schools were opened. Primary education was declared to be free over the whole Pudukkottai State outside the capital town in 1912. The Darbar's Elementary Education Regulation of 1925 made it compulsory for all children between the ages 7 and 11 to attend a recognized school in all taluk centres.

The following tables¹ will give an idea of the advance in literacy in Pudukkottai during these decades.

Literacy per 10,000 of Population.

			1891	1901	1911	1921	1931
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Pudukkottai State.	Males ..	2,053	2,125	2,260	2,555	2,820	
	Females ..	40	55	80	155	232	
Madras Presidency.	Males ..	1,646	1,601	1,833	1,986	2,107	
	Females ..	92	120	171	262	319	

¹ Source : A Manual of the Pudukkottai State—Vol. 1, 1938.

Literacy in English per 10,000 of Population.

		1901	1911	1921	1931
(1)	(2)	(3)	(4)	(5)	(6)
Pudukkottai State.	Males ..	82	87	152	178
	Females.	1	1	5	7
Madras Presidency.	Males ..	90	121	170	220
	Females	11	3	20	30

Owing to its comparatively smaller area (1,179 square miles in 1931) and a small population (400,694 in 1931), the figures are more favourable to Pudukkottai than to the large and diversely-peopled Madras Presidency. But the poor record of Pudukkottai in the matter of female literacy is noteworthy and does not do the former State credit.

In 1921 the total number of literate persons in Pudukkottai State was 42,929 and amounted to 196 per thousand among men and 13 per thousand among women. In 1931, there were 45,238 literate persons which amounted to 216 per thousand among men and 19 per thousand among women.

The figures in the following table shows the religion and caste classification of literacy in Pudukkottai State in 1931.

		<i>Number per 10,000 of the population</i>			
		<i>Males</i>		<i>Females.</i>	
		<i>Literate.</i>	<i>Literate in English.</i>	<i>Literate</i>	<i>Literate in English.</i>
(1)	(2)	(3)	(4)	(5)	
All religions	2,162	178	187	7	
Hindus	2,052	178	187	7	
{ Brahmins	7,600	3,687	3,329	103	
{ Depressed classes	769				
{ Others	2,073				
Muslims	4,353	108	173	..	
Christians	2,583	235	190	56	
Roman Catholics	2,490	108	102	10	
Protestant sects ..	5,455	3,091	3,702	1,830	

An Anglo-Vernacular School had been started in 1857, in the first wave of 'Macaulay-type' schools in Pudukkottai town under the title 'Maharaja's Free School'. In 1875, Caldwell, an Inspector of Schools in the Madras Presidency was requested to inspect the school and suggest means of improving it. Under his advice, a graduate Headmaster was appointed to the school in 1878. The school had hitherto taught only up to the fifth form. Now it was remodelled, re-classified and its curriculum was revised to suit the Matriculation standard. The strength soon increased. The then Raja's grandson himself entered the institution as a student. The year 1880, when the school sent up candidates to the Matriculation examination for the first time may be regarded as the starting point of the institution's 'College' character. A 'College Department' was opened in it in this year and the institution was affiliated to the Madras University. The accommodation having been found insufficient, a new building outside the limits of the then town was built. This came up in 1891—a fine edifice in red brick, which houses the institution to this day. It was originally rectangular in shape but after the construction of its science laboratories, library and theatre, it became a more complex structure. College was reorganised between the years 1908 and 1910 to suit remodelled courses of Secondary and University Education and prepared students, in time, for the Madras Government Secondary School-Leaving Certificate and the Madras University Intermediate Examinations. Till 1920, however, collegiate instruction was confined to History. In 1928 engineering courses were introduced.

Some Personalities—Pudukkottai Education.—A succession of distinguished principals and Professors served the College, of whom S. Narayanaswamy Aiyar, a pioneer of English education, and S. Radhakrishna Aiyar, the versatile scholar, mathematician and author of *A General History of Pudukkottai State*, are notable.

K. Nagarajan, an alumnus of the College, writes : "Narayanaswamy Aiyar was a man of action but it was in his successor that we had a scholar of the finest vintage. That was Radhakrishna Aiyar, of Arithmetic fame, and he can be described only by a series of superlatives. He was the ugliest man I have known and the most

learned in this part of the world. Short, squat, blear-eyed, with no neck worth mentioning, he rarely shaved and my recollection of him is of a man who had always on his face a fortnight's growth of the bristliest hair. He was perpetually chewing betel and tobacco from which the juice descended in a ceaseless drip on to his coat. He was racked by asthma—that was said to be the cause of his addiction to tobacco—but never once was he known to compalin. He was thick-lipped and his enunciation indistinct. But the man had a brain and in figures, was a positive genius. I have been told by those competent to judge that he was one of the finest pure mathematicians of his day and it is a pity that he had to blush unseen in the backwaters of Pudukkottai. Radhakrishna Aiyar, however, had no regrets. He was perfectly happy educating the Young Idea. He had a phenomenal memory and could recite large chunks of Shakespeare and Milton and even Chaucer, with relish and elaborate gestures though very few could follow his recitation for the sounds which he emitted bore no recognizable relation to English. I am positive he had never met an Englishman, at close quarters except, perhaps, his professor at college, and yet he had remarkable knowledge of English ways and customs. Once he called upon his students of the Intermediate Class to correctly pronounce certain English names which he wrote on the black board. They were Marjoribanks, Mainwaring and Beauchamp, and were names borne by men well-known in the Madras of the day. There were one or two lecturers present and not one of us was able to pronounce the names properly; our pronounciation faithfully followed the spelling. Radhakrishna Aiyar proceeded to enlighten us and all that we realised was the lawlessness of English spelling. Once he gave us a chestnut in class. The Bell told the sexton and the Sexton toll'd the bell. The class was silent as the grave. Radhakrishna Aiyar demanded "why don't you laugh?" and explained to an uncomprehending class where the joke lay. A laugh dutifully followed".

Radhakrishna Aiyar will be best remembered as a mathematician. The Imperial Gazetteer of India,¹ writing of the state of education and literacy in Pudukkottai as assessed in the Census of India, 1901, said: "According to the Census of 1901 Pudukkottai

¹ Volume XX (Pardi to Pusad); Oxford, published at the Clarendon Press 1908; Pages 239—240,

if it had been a British District, would have taken the fifth place among the twenty-two Districts of the Madras Presidency as regards the education of its male population.... The control of the Educational department is vested in the Principal of the College. Mr. Radhakrishna Aiyar, a gentleman known even in Europe for his works on arithmetic."

Radhakrishna Aiyar - book *A Manual of Arithmetic*. published in 1884 for the use of Middle and High Schools. says :

TO .
THE HON.A. SASHIA SASTRIYAR. C.S.I.
DEWAN OF PUDUKKOTTAI
THIS VOLUME

Is most respectfully dedicated
(WITH PERMISSION)
As a token of gratitude and esteem
BY HIS HUMBLE SERVANT

The Author.

The book (with exercise questions such as "In a pial school of 70 boys, 45 learn to read ; what is the percentage ? "and" $28\frac{1}{2}$ chackrams = R. 12 $2\frac{2}{5}$ p.; 20 amman cashes = $1\frac{1}{4}$ d; and 1s = 8 as. 3 3/92p. How many chackrams can I get for 1907712 ammon cashes ? belongs to an age ended with the nineteenth century. And yet, Anand Doraswami of the School Mathematics, Tata Institute of Fundamental Research 'Bomany, viewing the book in 1975 for the *Pudukkottai District Gazetteer*, writes : " *A Manual of Arithmetic* by S.Radhakrishna Aiyar, would be just as useful in our school today as it was ninety years ago. The only changes it requires are the substitution of current weights, measures and coinage for what was in use then. This is partly a reflection of the fact that syllabi in arithmetic have remained largely unchanged ; but it is also due to the rigour, precision and logical accuracy which characterise the exposition of arithmetical principles in the book. The book has a practical bias. Its coverage of commercial arithmetic is

wide enough to satisfy bankers, actuaries, and accountants. Moreover the problems are always placed in a concrete context, to show that arithmetic is a serviceable instrument in the heads of the man in the street. In spite of this, logical clarity has not suffered so that the book certainly meets the requirements of the fastidious pure mathematician.

The book is far more comprehensive than modern texts. Apart from commercial arithmetic, it lays great stress on mental arithmetic as a tool in developing the manipulative abilities required in every day life. It also deals with recurring decimals— circulating decimals ' as they were then known—at great length.

The author has taken great pains to collect together the various systems of weights, measures and coinage in use in India, and even includes the coinage used in the time of Bhaskaracharya.

The book contains a selection of problems from the *Lilavati* some of which illustrate the sufficiency of arithmetic in solving problems which are more directly solved by the (algebraical) method of simple equations. The solution of one of these requires the division of zero by zero and the answer (which is - indeterminate, i.e., any number will do as the answer) is assumed to be unity. This is perhaps the only serious mistake in the book.

The book contains everything that is useful and much that is interesting in arithmetic. It is almost impossible to be original in writing such a book but the exposition can be interesting enough to generate a love for mathematics in the reader. Radharishna Aiyer's *Manual of Arithmetic* must certainly have done this for many of its readers."

The College had a representative enrolment. Its Lower Secondary High School, and Intermediate classes had among them Hindus, Muslims and Christians. The Hindu section had a predominantly 'backward class' composition, apart from the caste Hindu, brahmin and 'Adi-dravida' groups.

H.H. The Raja's College. Pudukkottai was clearly intended to create a class of persons who as Macaulay desired would be "Indian in blood and colour, but English in taste, in opinion, in morals and in intellect." Being English or western in opinion

should, strictly speaking, have meant being liberal enough to make no discriminations against caste, creed or sex. As has been said already, the College admitted people belonging to all denominations—save one.

The Darbar records in Pudukkottai have material on the discussion that took place in the College and Darbar over the application for admission to the F.A. Course from C.N. Muthulakshmi, the eighteen year old daughter of Narayanaswamy Aiyar, a former Principal of the College and Chandrammal, a talented member of the *melagar*¹ or *devadasi* community. Muthulakshmi had passed her matriculation examination. In this application which was written out by her in English on the 4th of February 1904, Muthulakshmi said she was "eager to commence the collegiate course". Until that time no girl had been admitted to the College. An application thus written by the young hopeful herself, belonging as she did to the *devadasi* community, caused no small flutter in the Establishment. Narayanaswamy Aiyar supported the desire of the girl with all his might. Radhakrishna Aiyar, who was then Principal, wrote to the Darbar : "I do not think it advisable to admit her into the regular class and train her along with the other students, who are boys, as I believe, that such a procedure will demoralise the boys." The then Councillor and Diwan supported the Principal's view. The Diwan, A. Venkataramadas, observed : "The policy of the State having all along been not to allow girls of the *melagar* caste even into the Sirkar Girls School in the town, and the furthering of the education of a girl of that caste not appearing to me to help the cause of female education in the State. I doubt if it is advisable.." It must be said to the credit of the vision and independence of Martanda Bhairava Tondaiman, the then Raja of Pudukkottai, that he overruled this advice. Little did he realise then that this girl he was helping was destined not merely to complete her educational stint at the Raja's College but was later to pass out as the first woman medical graduate of the Madras University ; to become, in time,

¹ The word; also spelt *melakar*, means 'piper', after the fact that the men belonging to this community often played the *nadaswaram*, a piped instrument,

The first Indian woman member of a Legislative Council ; and finally to distinguish herself in the world of social reform as Dr. Muthulakshmi Reddy, founder of the Avvai Home at Adyar and inspirer of several projects, voluntary and governmental, for the redemption of "the lonely and the lost".

Another old student of the College, P.V. Akilandam, better known in the world of modern Tamil literature as Akilon¹, recalls² the atmosphere in Pudukkottai and in the College during the heady nationalistic days of the '40s.

Pudukkottai, he says, was then "a very well-administered State". Its people were generally contented with their Government. Competent officers working single-mindedly in the small area that Pudukkottai was, ensured immediacy in the business of delivering the goods. When British India around Pudukkottai saw famine, the Pudukkottai State would have enough. "I know", Akilon says, "because I would go to visit my mother in Karur, where things were not available". There was in Pudukkottai, no keg of dry gunpowder which the fires of nationalism from British India could easily detonate. Pudukkottai was, at the time, under a system of benevolent despotism, with a mastermind—Alexander Loftus Tottenham—at its helm. Tottenham was a no-nonsense man but one who could, by the strength of his personality win the admiration even of his opponents.

On the question of nationalist activities, however, there was no compromising. Tottenham, "a genius in administration", was "very strict" about not giving any quarter to agitations aimed at political change. College students dared read the works of Subrahmanya Bharati only "under the desk". Akilon relates: "As a student, I liked to sport a Gandhi cap. Once when I was to play in a cricket match, I had the cap on. I was told to remove it. 'Certainly not', I said, chucking the ball away. I would rather not play". The lid over political freedom was tight. But the winds of change could not be kept out entirely.

¹ Author of *Paavai Vilakku*, *Vengaiyin Maṇḍan* and a number of other stories. Akilon was born in Perungalur, Pudukkottai, on 27th June 1922. He is now Producer, Spoken-Word, All India Radio, Madras.

² In an interview with the Editor, *Gazetteers*, Madras, on 12th December 1974.

Akilon recounts the formation by him and a few other students, of a youth front in the early '40s, the "Shakti Valibar Sangam". It consisted of students who had "dropped out" of College and wanted to organise youth activities from outside. (Akilon was its Founder Secretary from 1940 to September 1942). Predictably the College establishment and the Darbar were wary of this body. Students of the College "decided", Akilon says, to celebrate Subrahmanya Bharati's death anniversary on September 11 in 1941 as Bharati Day. An embarrassed Principal thought he could give the "risky" function an official stamp by inviting Khalifullah Sahib, the Assistant Administrator, to attend. Even though the students initially agreed to this, things went out of hand at the appointed time and there was pandemonium. A bundle of paper, Akilon remembers, was thrown on Khalifullah Sahib. Ajatha marched to Tottenham's house and, knowing that Tottenham hated any kind of noise, deliberately raised a cacophony there, with the aid (among other instruments) of motor-horns. (Tottenham was so averse to noise that he had got the road opposite his house declared a no-horn zone and had directed the police to keep it clear of all animals that could break the silence, including squirrels.)

The All India Congress Committee passed the historic Quit India resolution in Bombay on August 9, 1942. The same evening, top Congress leaders all over the country were arrested. The Shakti Valibar Sangam in Pudukkottai felt called upon to do something. A strike—the first such in Pudukkottai—was announced on August 15, in the College. Several students were rounded up.

Members of the Sangam, including Akilon, were being watched—"the newspaper boy used to say on us for the State, and, we, knowing this, would boast to him that we were manufacturing bombs"—and had to leave the State, thereafter."

Primary Education Today.

Statistical realities.—One of the challenges faced by free India has been the educational backwardness of the country. Nearly thirty years after Independence, we are still at a distance from our educational goal. The number of literates is being continually outstripped by that of the illiterates. This is true even of States

such as Tamil Nadu which, among the others, is considered educationally advanced. In 1971, out of a population of, 4.12 crores, Tamil Nadu had only 1.63 crores or 39.5 per cent literate and educated persons. Of the total population comprised in Pudukkottai district, according to figures in the Census of India, 1971, 31.4 per cent are literate or educated. The percentages of literates and educated persons among the district's male and female population work out to 46.0 and 16.9 respectively. The 1971 all-India percentage of literates and educated persons among males and females is 29.5 and 18.7 respectively.

A study made by Ashish Bose¹, Professor and Head of the Demographic Research Centre, Institute of Economic Growth, Delhi, shows that the highest literacy rate for females in the country (63 per cent) was in the age-group 15-19, and that for females (37.4 per cent) was in the age-group 10-14. Among the total female literates, Bose calculates, as much as 40 per cent have no educational level being semi-literates, really, while 7.8 per cent are matriculates and only 1.4 per cent graduates and above.

The following figures show the present level of literacy and education in the Pudukkottai district.

CENSUS OF INDIA, 1971.

<i>Place.</i>	<i>Total popula- tion.</i>	<i>Literate popula- tion.</i>	<i>Per centage total.</i>
(1)	(2)	(3)	(4)
1 Pudukkottai District	9,47,351	2,97,443	31.4
2 Kullattur Taluk	2,14,904	56,493	26.3
3 Arantangi Taluk	2,08,961	68,442	32.7
4 Tirumayam Taluk	1,97,443	58,884	29.8
5 Pudukkottai Taluk	1,64,602	65,893	40.0
6 Alangudi	1,61,441	47,731	29.5

¹ 'A Demographic Profile' in *Indian women* (1975), Publications Division Government of India.

The percentage of literacy among men and women in each taluk is as follows :—

Place.						Men.	Women.
(1)						(2)	(3)
1 Kulathur	..	..	..	..	..	40·3	12·2
2 Arantangi	..	..	..	..	..	48·5	17·1
3 Tirumayam	..	..	..	..	..	43·4	17·3
4 Pudukkottai	..	..	..	..	..	53·6	26·2
5 Alangudi	..	..	..	..	..	45·8	13·1

The figures speak for themselves. They indicate the magnitude of work that lies ahead. This does not, of course, mean that progress has been absent.

Elementary Schools.—In the four Five-Year Plans completed, “the primary school has entered areas which had never known what it was to have one, and some villages with a sizeable population can boast even of a secondary school¹.”

In the State Government's programme for education, Pudukkottai has received its share of outlays. On the 1st of September, 1975, there were 928 Elementary Schools in Pudukkottai district with a total number of 99,145 students—59,673 boys and 39,472 girls. The figures include schools run directly by Government those run by Panchayat Unions (the majority), aided schools, and Municipal Schools in Pudukkottai town. There are some 2,300 teachers employed in these Elementary Schools. On an average, each school has 3 teachers.

Middle Schools.—There are 136 Middle Schools in the district including Upper Primary Schools. There were, on the 1st of September, 1975, 40,800 students in these schools—25,500 boys and 15,300 girls.

High Schools.—There are 53 High Schools in the district of which 44 are run by the Government and 9 are aided schools. These had on 31st March 1975 a total strength of 946 teachers and

¹ Seminar July 1965.

18,923 students. Of these 15,666 were boys and 3,257 girls. Out of these, 10,296 (8,334 boys and 1,962 girls) were studying, on that date, in the Middle School section and the remaining 8,627 (7,332 boys and 1,295 girls) in the High School section.

Besides the above, there are 8 Girls High Schools in the district with a teaching staff of 122 persons. The total number of girls studying in these schools as on 31st March 1975 was 2,691—1,330 girls in the Middle School levels and 1,361 in the High School levels.

Oriental School.—There are two Oriental Schools in the district. On 1st August 1975 these two institutions had a total student strength of 334 boys and 92 girls.

Repatriates Schools.—A school for the children of Indian repatriates from Burma and Sri Lanka is run at Mattur. This is the only school in the district which has facilities for primary, middle and high school levels of education in the same institution. On 1st March 1975, the total number of pupils in this school was 815—457 boys and 358 girls.

Borstal Schools.—The school is run by the Government of Tamil Nadu under the administrative control of the Inspector-General of Prisons. The Superintendent is the head of the institution, assisted by a Deputy Superintendent and a hierarchy of staff. In this School, adolescent offenders of the age group 18 to 23 are detained and given training in educational, vocational, gardening and other activities and are subject to such disciplinary and moral influence conducive to their proper rehabilitation. The minimum period of detention is 2 years. No adolescent offender is confined in this school, when he attains the age of 23 years. He is either released or transferred to the nearest Central Prison for further confinement as the case may be.

Education up to eighth Standard is given by trained teachers and those who like to pursue further study are given necessary facilities. Deserving inmates are also sent to Industrial Training Institutions and High Schools for attending their classes. Regular training in the scout movement is given under the personal supervision of a

Scout Instructor, who was formerly District Commissioner of Scouts. Scout camps are conducted annually at selected places. Educational classes are subject to annual inspection by the District Educational officer.

The inmates confined here are divided into six houses to have a healthy atmosphere and competitive spirit in all sides of the school administration. Each house is having its own inmate leader under the control of a paid teacher to maintain discipline and order, and for the entire six houses there is a Monitor. Inmates are divided into three groups viz., ordinary class, star class and special star class and they earn gratuity (Badge money) as follows :—

- (i) Star grade Re. 1 per month.
- (ii) Special Star grade .. Rs. 1-50 per month.
- (iii) Monitor Rs. 2-00 per month.

There is a petty shop run by a Committee consisting of members of the staff and a few inmates elected by themselves, from which stationeries, toilets and eatables can be obtained by the inmates from their badge money (Gratuity). There is a Hobby Centre, where inmates with necessary skill and talent are given all facilities to develop their hobbies in painting, drawing, music, etc. There is an Information Centre functioning wherein notices on current affairs are affixed to enable the inmates to be in touch with the happenings outside.

There is a band-troop under a paid Band Master who gives training to certain inmates in each of the instruments. This band troop is permitted to play on hire charges at the rate of Rs. 20 for the first hour and Rs. 15 for every subsequent hours from which amount the inmates in the troop will get 50 per cent of the cash received as their own .

Every year, sports are conducted for the inmates with public distribution of prizes.

There is a Court of Honour functioning, in which the offences, if any, committed by the inmates are enquired into by the Superintendent and appropriate punishment inflicted.

There is a Visiting Committee for the Borstal School, for which the Collector of the District is the Chariman. The Visiting Committee shall consider the cases of all inmates who have undergone not less than six months of detention or in the opinion of the Superintendent are fit for release on licence ; all cases which fall within the scope of Section 14 of the Borstal Act, and the cases of all inmates who owing to mental deficiency, are unfit for Borstal training.

The authorised accommodation of the Borstal School is 2051. Besides this there is a dormitory, which will accomodate 200 prisoners. In the dormitory adolescent prisoners of age group 21-23 years are admitted and they are governed by the remission rules, except in the matter of diet and other facilities, like that of the borstal inmates. Like the Borstal inmates, the adolescent prisoners, who are confined in the dormitory, after attaining the age of 25 years, are transferred to the nearest Central Prison to undergo their unexpired portion of sentence, if any.

There are over a thousand mid-day meal centres in the district's schools where some 45,000 pupils are given one free meal by the State Government every day.

Until the 1st of October, 1974, the feeding programme was financed by the Government as also by public donations. The Government contributed a grant of a 6 paise per pupil per meal while the public contributed 4 paise. From the date mentioned, the Government's contribution has been raised to 10 paise per pupil for 200 days and the public contribution has been substituted by a contribution from local bodies such as Municipalities, Panchayat Union Councils and Panchayats at a minimum rate of 5 paise per pupil for 200 days. This financing of the programme is in addition to gift food of the value of about Rs. 6 crores per year received from CARE. This contribution money is used for purchase of local food stuffs such as rice and condiments and for purchase of fuel. This programme is functioning in 30,000 primary schools throughout the State. CARE provides in these centres, 80 grams of grain and 7 grams of oil per beneficiary per day.

Notwithstanding the educational advance in terms of numbers educationists have been worried about certain problems that beset school education in villages such as Pudukkottai's.

Expansion has been largely quantitative. Overcrowding in classrooms (a single room generally accommodates all the classes in different clusters) has increased. A case apart, is the Borstal¹ School.

Advanced Education.

Collegiate Education for Men.—On the merger of Pudukkottai with the Madras State the Raja's College became a Government institution, under the control of the Director of Collegiate Education, Madras. In 1949 B.Com., classes were opened. Hindi was introduced as a language under Part II for the Intermediate in 1950 and for B.A., in 1952.

The introduction of the new scheme of University Education in 1956 led to the replacement of the Intermediate and the two year degree course by the Pre-University and three year degree course respectively.

From June 1959 the College was further affiliated in B.Sc., Chemistry Major with Physics, Composite Physics and Composite Mathematics as ancillary. For the purpose of housing the Chemistry Major and the Physics Major Courses a new block was constructed at a cost of about Rs. 1,00,000. In June 1961 the College was affiliated in B.Sc., Physics and Botony ancillary.

In June 1968 the College was affiliated in B.Sc., Botany and Zoology ancillary.

H.H. The Rajah's College, now renamed H.H. The Raja's Government College, had in October 1975 a strength of 1370 students. Of these 1,258 were men and 112 women students—the latter being most probably, quite oblivious of the difficulties that Muthulakshmi Reddy had to face before women's participation in that College became possible. Of the total number of students in the College, 721 belonged to the "backward classes", 215 to the scheduled castes, 3 to the scheduled tribes.

1. The term 'Borstal' is derived from the name of the town in Kent England, where this form of correctional imprisonment was first tried in 1902

There are about 150 members of the staff teaching and non teaching.

For Women.—The Kalaignar Karunanidhi Government Arts College for Women, the first women's college in Pudukkottai, is a joint effort on the part of the people of Pudukkottai and the Government of Tamil Nadu.

Until 1969 the only provision for University Education for women in Pudukkottai was the allotment of 100 seats in the degree and undergraduate classes in H.H. The Raja's College, Pudukkottai. This was found to be insufficient to meet the growing demand. A separate women's College was felt to be an absolute necessity and a college formation committee was constituted under the distinguished patronage of the former Raja of Pudukkottai and the presidentship of Thiru Santhappa Subramaniam. The committee collected donations totalling Rs. 5 lakhs from the philanthropic public of Pudukkottai and its neighbourhood, towards the starting of the college. Temporary accommodation for the college was provided by the municipality at Vijaya Raghunatha Sadanam, a two storeyed building suitably modified to meet the requirements of the college. The preliminary work of the college was done in a small room in H.H. The Rajah's College. When the Government of Tamil Nadu sanctioned the establishment of the new women's college at Pudukkottai and approved of the proposal to name the college after the Chief Minister of Tamil Nadu, the Education Department of the Government received 21.69 acres of land for the construction of permanent buildings. On the 1st of July 1969 the college was formally inaugurated by His Excellency Sardar Ujjal Singh, the Governor of Tamil Nadu. On the same day, the Governor also laid the foundation stone for the permanent buildings of the college.

The Pre-University Course was commenced with 3 members on the teaching staff 3 members in the office, and 8 contingent staff, 226 students were admitted in the P.U.C. A hostel for residential scholars started functioning with 84 students. For the first academic year of the College, 1969-70, it was granted affiliation for the following courses in the Pre-University class in Tamil Nadu.

1. Mathematics, Physics and Chemistry.
2. Natural Science, Physics and Chemistry.
3. History, Economics and Advanced language.

Parallel courses in the English Medium for the affiliated groups, were started in 1971-72.

In 1972 the college was upgraded when the Madras University granted affiliation for B.Sc., Mathematics with Ancillary Physics and Chemistry. 40 seats (in both the media) were sanctioned. The new college building, now ready was formally opened by the Hon'ble Education Minister, on 4th September 1972.

The second B.Sc., Degree Course in Zoology was started in the College in July 1974, when Madras University granted the college affiliation for 27 seats in B.Sc., Zoology in both the media.

The college is situated in Kattuputhukulam Thidal at the intersection of Governor Road and Satyamurthi Road. It is a grey two storeyed stone building with an imposing facade. The college has now two degree courses along with the Pre-University, 300 students (all and only girls) on its rolls. 25 members of the teaching faculty in 9 departments of study and an office with 20 members on its staff. The laboratories for Chemistry, Physics, Botany and Zoology are all on the ground floor each well equipped and accommodating 30 students at a time. The Principal's room and the administrative offices are on the first floor. A recent addition to the campus is a lunch annexe for the day scholars. The college hostel is in a rented building "Ceylon House" on Railway Station Road and has 67 inmates now, under the watchful guardianship of the Warden (the Principal of the College), the Deputy Warden and a Residential Tutor. The College Library, small, selective and growing, has 4,000 books on its shelves (which includes standard works in all the subjects of study in the College as well as books of general interest) as also a regular supply of newspapers, magazines and periodicals, in both Tamil and English.

In 1975 the first set of graduates in Mathematics have passed out of the College.

Teachers Training.—The Government training College at Pudukkottai was started on 1st August 1955 in the Government Brahadambal School. It now offers a regular B.Ed., Course ; a Tamil Pandits' Training Course ; and an M.Ed., Course with the optional subjects of Advanced Educational Psychology. In 1975 the Training College had a total of 154 students, of whom 142 were from the ' *Backward Classes* ' and 12 from the Scheduled Castes. All of them were men. The College has a teaching staff of 13 members. It has a separate building and a hostel where some 75 trainees reside.

Technical Education.—While a study of the humanities and the pure sciences must always be part of our educational *availability* we have to take note of certain national developments. Dr. K. A. V. Pandalai, Director of Indian Institute of Technology, Madras, observes¹: " Out of the unemployed, which has crossed the 10 million mark, 8 million are in rural areas or villages which are 0.562 million in number and where 70 per cent of the population lives. The educated unemployed exceed 4 million. The student population in schools in the age group of 6 to 16 is about 100 million, whereas the college student population is about 4 million. . . The salvation for a country like India lies in informal, functional education, which is practical and needbased and which need not necessarily lead to any degree or diploma, but provides gainful employment and productivity in the vast majority."

The Pudukkottai district has one Industrial Technical Institute (ITI) at Pudukkottai town with a capacity of 182. The trades in which training is imparted include wiring, Turning, Fitting (two year courses), and a one year course in welding.

CHAPTER XVI—MEDICAL AND PUBLIC HEALTH SERVICES.

Not less difficult than the confrontation with illiteracy has been the confrontation with disease. Medical standards and aspirations for medical service have made the administration of medical and public health services, a governmental programme of the highest importance.

To the provision of normal medical facilities has been added an imperative programme for birth limitation.

Public Health.

Writing in 1907, F. R. Hemingway the author of the *Gazetteer of the Trichinopoly District* observed that Pudukkottai's climate "resembles that of the surrounding districts and is fairly healthy". Pudukkottai's proximity to the sea made it comparatively cooler, he said, while its general climate was so dry as to keep malaria-bearing mosquitos at bay. As a broad observation on Pudukkottai's influence on one's health, the Hemingway analysis is substantially accurate.

But like other areas in Tamil Nadu with a *prima facie* 'healthy' climate and environment, the district is not really free from disease. It has had its stock of endemic and epidemic diseases.

Cholera.—This once-fatal disease (whose symptoms are too well known to be described here) is now under check. In the last century and the early decades of the present, it used often to swamp across the countryside in unchecked epidemics.

Fairs and festivals, with the insanitation that accompanies them, are the favourite breeding ground of cholera germs. Attracting a large congregation with no arrangements for sanitation, festive gatherings are to the cholera germ an excellent opportunity for self-propagation. Flies, hopping from faeces and vomit to food convey the dread microbe with great efficiency. The pilgrims and children at the site, invariably lost in spiritual or mundane preoccupations, scarcely realize they have imbibed a vicious visitor, until it is too late. Pilgrims returning from

crowded festivals such as the Vaikuntha Ekadasi at Srirangam, the Karttikai Dipam at Tiruvannamalai, or local festivals such as the Mariamman festival at Narttamalai would, in this manner, introduce cholera germs into the Pudukkottai countryside. The disease once brought in would spread rapidly. They would be assisted in this by the water tanks, whether *ooranies* or plain irrigation *kulams*, that have always been put to the dangerously combined multipurpose use of drinking water reservoirs, washing-places and bidets. Cholera micro-organisms, which thrive in water as they do in solids, have traditionally found in Pudukkottai's, tank-dotted terrain a most reliable caravansera. Predictably the under-privileged sections of the village have suffered more on account of the age-old indifference to considerations of hygiene and sanitation. Mortality among them has also been higher because of the absence of quick medical aid.

Severe outbreaks of cholera were reported in 1859, 1866-67, 1871, 1883-84 and 1887-78. In the 1887-88 epidemic out of 636 cases, as many as 402 were fatal. Tiruvappur and Annavasal were badly hit in 1889-90, and the temple-village of Nedungudi in 1895. In the year 1891-92 a particularly bad epidemic swept through the Pudukkottai State like fire, killing 890 people, whereupon the Pudukkottai Durbar opened Cholera Camps to arrest the disease. But cholera visitations were experienced in the Pudukkottai area again, in 1907 (951 deaths), 1908 (694 deaths) and 1914-5 (1,154 deaths). Between the years 1924 and 1928 there were 4,180 deaths in the Pudukkottai State. A land mark and turning point in the history of cholera in Pudukkottai was the opening in 1930 of a Pathological and Bacteriological Section in H. H. The Rajah's Hospital, Pudukkottai. Equipped to conduct microscopic and cultural examinations, it moved into the scene to determine the presence or absence of cholera germs in specimens so as to assist in eradicating them. There were only stray cases in Pudukkottai State between 1931 and 1934. In 1935, however, cholera claimed 77 deaths.

Sporadic cases are even now reported. In 1974 there was one case in Kadayappatti, two in Annavasal and four in Tiruvarankulam. But the Government-run Primary Health Centres and Mobile Medical Units attached to the District Health Officer,

firuchirappalli have been conducting regular anti-cholera inoculations. By the end of July 1975, 23,154 anti-cholera inoculations had been administered.¹ Whenever an outbreak is suspected or is deemed likely, public health authorities chlorinate the water-supply, disinfect the houses attached and control fly-breeding.

Suspected cases of cholera in the district now can be put through a detailed examination with the additional help of the Bacteriological Cell at the Medical College, Thanjavur, or the Medical Officer in-charge of the Principal Laboratory (Medical Wing), Coimbatore. No village can now be termed endemic in Pudukkottai, and cholera has ceased to kill.

Small Pox.—A familiar sight in Pudukkottai villages (as, indeed, elsewhere in Tamil Nadu) has been a bunch of margosa leaves hung over the entrance to a house in which someone afflicted with the pox lies. This age-old and vaguely totemic practice serves the important and scientific purpose of forewarning likely visitors of the disease inside.

Small pox spreads through contact with infected persons, their clothes, utensils or any other object used by the patients. The disfiguring rashes that occur on face and hands, developing into papules, vesicles and pustules, begin to drop off in about three weeks from their first appearance. Communication of the disease is also possible through these dropped skin-spots. This is why the clothes and linen used by the patient, which hold the fallen pox-heads, are advised to be burnt. Isolation of the patient to the desired degree is not easy, and the disease spreads easily, margosa or no, if it has set in. Prominent outbreaks of small pox occurred in Pudukkottai in 1866-67, 1867-68, 1874-75, 1876-77, 1889-90 and 1891-92. There were 429 and 559 fatal cases in 1905-6 and 1907-8 respectively. In the years 1931-34 there were 1,863 deaths due to small pox.

The adage "prevention is better than cure", is applicable to all diseases. But in the case of small pox its applicability is all the greater on account of the demonstrated efficacy of the available preventive steps against the disease. Vaccination was introduced in the Pudukkottai State at the suggestion of the first British Officer

¹ Report from the Director of Health Services and Family Planning, Madras, dated August 11, 1975, for the *Pudukkottai District Gazetteer*.

In Pudukkottai, Major Blackburne, in 1812. A vaccinating staff was organised and trained by the British Deputy Superintendent of Vaccination at Tanjore. In 1875 vaccination was made compulsory for all infants. Sir A. Sashiah Sastri who was Diwan-Regent of Pudukkottai at this time, closely observed the work of vaccinators and tried to push the preventive drive forward. While he did not make vaccination compulsory for the entire State, he tried to persuade people in its favour by introducing a scheme of batta-payment to vaccine subjects.¹ In 1898, four years after Sastri's retirement, vaccination was made compulsory for all residents of Pudukkottai town. A vaccination depot was built in 1910, and in 1911 the entire population was brought under compulsory vaccination. Re-vaccinations were carried out in 1935-36 for 10,976 persons.

The National Small Pox Eradication Programme of the Government of India has been in force in Pudukkottai since 1963. At present one Divisional Health Inspector, three Health Inspectors and ten vaccinators are in the field from the Government side. Nineteen Health Assistants borne on Panchayat Union funds also attend to this work. These Health Assistants are appointed in proportion to the total population. For every 50,000 one Health Assistant is appointed. In 1974, 1,19,564 primary vaccinations and 25,344 revaccinations were carried out in the district².

Since 1968 there has been no incidence of small pox reported in the district. A survey conducted by the World Health Organization along with the State Government's Public Health authorities found the district in 1973-74 and 1975 to be free from the disease.

Guinea-worm.—Pudukkottai was once guinea-worm country extraordinary. The town was regarded, in fact, as the principal home of the disease in southern India. There are good geo-medical reasons for this. The guinea-worm (*Dracunculus*) is a slender milk-white worm of the thickness of twine except at the extremity where it is as thin as human hair. The male is not known to cause the disease. It is the female, about forty inches in length

¹ Paragraph 42 of the Report of the *Administration of Pudukkottai* 1880-81.

² Report from the Director of Health Services and Family Planning Madras, dated August 11, 1975, for the *Pudukkottai District Gazetteer*.

that is the deadlier of the species. When the person affected by guinea-worm goes to the water-source and when the affected part comes in contact with water, the embryo are discharged in the water which in turn is swallowed by cyprian. When the water is drunk¹, the guinea-worm-bearing cyclops enter the stomach where they are destroyed by gastric acids. But as the cyclops perish the guinea-worm-larvae get liberated and, passing through the intestines lodge themselves in sub-cutaneous tissues which often come in contact with water. There they remain unsuspected until such time as the females are fertilized by the males. Blisters then appear in the connected tissues, usually in the abdomen legs or arms. After a few days the blister distends and a good-sized worm emerges.

The indigenous treatment has been to catch the end of the worm as it presents itself outside the blister, coil it round an object such as a roll of cloth. Then, delicately, to extract a little of it daily by gradually winding the worm round the roll. Care is taken lest the worm break or lest the part of the worm that is exposed, on becoming dry, snap even without the application of force. Extraction is attempted once in twenty-four hours when perhaps an inch or more may be gained. If sometimes the worm breaks, much trouble is caused.

The high point in Pudukkottai's guinea-worm history were in the years 1869-71, 1881-83 and 1890-91. The attacks in 1869-71 were so serious that the Government of Madras advised a cleaning of drinking water tanks and wells in Pudukkottai. In 1882 the disease affected almost every household in the town. Sri Sashiah Sastri nearly stamped it out in 1885 when he organized a cleaning-up and protecting of drinking water sources.

A Guinea-worm Eradication Programme of the State Government has been functioning for the last ten years. It is administered by the District Health Officer. A sub-unit is functioning at Keeranur with one Health Inspector and four Field Assistants.

The sub-unit conducts cyclops survey in the drinking water sources and treats the water sources where cyclops breeding is noticed, with D.D.T. 50 per cent water wettable powder in the strength of 5 p.p.m. once in 6 weeks, to destroy them. Besides

¹They are thought by some persons to penetrate through the perspiratory ducts of which there are some 3,500 in every square inch of skin.

the affected parts of the infected persons are treated with 4 per cent carbolic lotion to alleviate their pain. The disease has been brought so much under control as to be almost non-existent.¹

During the year 1960, 939 guinea-worm cases were recorded in 31 infected villages. By successful implementation of the programme, the number of cases was reduced to 4 in 2 infected villages in 1967. From every year 1968 onwards, the area is free from guinea-worm. Yearwise particulars regarding the number of guinea-worm infected villages and the number of cases infected are given in the following table.

Year			Number of Villages Infected (Guinea-Worm)	Number of cases infected (Guinea Worm)	Number of cases treated.
(1)			(2)	(3)	(4)
1960	..	..	31	939	939
1961	..	..	52	673	673
1962	..	..	38	606	606
1963	..	..	57	630	630
1964	..	..	30	144	144
1965	..	..	3	5	5
1966	..	..	6	22	22
1967	..	..	2	4	4
1968-1975	..	..	Nil.	Nil.	Nil.

Hook-worm.—The disease caused by this variety of worm is called Ankylostomiasis, after the scientific name of the worm.

The female hookworm inside a human body lays a large number of eggs which are expelled with faecal matter. The eggs deposited on soil hatch after an incubation of eighteen hours as tiny wrigglers. These attach themselves to exposed skin surfaces such as soles of bare feet and enter the blood stream by boring the skin. Once inside the human physiognomy they can reach any part of it—intestines, lungs or heart. The parasite grips the intestinal walls with its teeth and is dislodged only by germicides.

¹Report from the Director of Health Services and Family Planning Madras, dated August 21, 1975 for Pudukkottai District Gazetteer.

Believed to have been introduced to the Pudukkottai area¹ by some of the early immigrants returning from Ceylon, the disease is yet to be reckoned with. In the year 1974 about 5,200 cases of hookworm were treated in the district.²

Filariasis.—Once rampant, filaria is not very prevalent in the district now. It is caused by a small worm *Wucherera bancrofti* entering the body.

The fertilized female worms in the human body discharge numerous microfilariae which make their way into the blood stream. When the female culex mosquito bites the infected person, it ingests the microfilariae along with the blood. It undergoes developmental changes in the body of the mosquito and becomes infective in the course of 10—14 days. When the infected mosquito bites a person the larvae escapes into the skin and penetrates through the skin or enters through the puncture made by the mosquito. The larvae reach the lymphatics and settle down in the inguinal, scrotal or abdominal lymphatics.

The worm once entered in the body hides in a lymphatic gland or vessel and there gives birth to eggs or live worms. Fever, slight pain in the limb, and a thickening of some of the lymph vessels result. The acute stage soon subsides, recurring with the same symptoms at intervals leading to a gradual increase in the size of the limb affected. A permanent swelling of the scrotum or leg—the most commonly affected parts—is to be endured thereafter by the patient. Operations used to be the only remedy for filaria in the scrotum; filaria in the leg having earned the name of Elephantiasis, after a fancied resemblance to an elephant's limb.

Modern drugs can now arrest the disease, especially if detected in early stages. To arrest culex mosquito breeding in Pudukkottai town mosquito larvicidal oil (which is supplied free of cost by the Government of India) is used. Cases found positive for micro-filaria by night blood examination are directed to the nearest dispensaries for treatment with Diethylcarbamazine tablets. During 1974, 934 cases were treated. In addition Arantangi, Arimalam, Ponnama-

¹ Alangudi and Karambakkudi particularly.

² Report from the Director of Health Services and Family Plannin Madras, dated August 11, 1975, for the *Pudukkottai District Gazetteer*.

ravati and Rayavaram Panchayats are implementing Anti-Filaria and Anti-Mosquito Schemes with $\frac{1}{3}$ and $\frac{1}{4}$ grants respectively from State funds.

Larvicidal oil supplied free of cost by the Government of India is used by Field Staff which also conducts periodical surveys for the detection of micro-filaria, and treats positive cases. 934 cases were treated in the district in 1974.¹

Leprosy—Leprosy, the disease that made Father Damien of Molokoi a hero and martyr among missionaries, continues to pose a challenge in India. The disease is widespread in the country with some 25,00,000 cases recorded in 1965. Dr. Sushila Nayar, the then Union Minister for Health, observed² in 1965: "The National Leprosy Control Programme, a three pronged drive of case detection, treatment and education of the patients and public is dealing with the Public Health aspects on a national scale. The despair that was present in the past for want of proven remedies and proper methods for the prevention of deformities is no more. With the advancement of modern medicine, leprosy is now a preventable and curable disease. The deformities can be prevented and when they do occur, they can be corrected in many cases." If all infective patients are converted into non-infective case by regular treatment, the source of infection or reservoir of infection becomes dried up. If the source is dried, the chance of dissemination into the community become remote. As some of the cases who have not been given treatment may become deformed, treatment has to be afforded to all cases. Therefore, in order to achieve this programme, the treatment should be made available as nearer the patient as possible, so that he can get the benefit of treatment without losing that day's wages and without losing contact with his family and society. This treatment is best afforded by a decentralised pattern of treatment in which a mobile team moves zone to zone and gives them the benefit of treatment. At present, there is no law or measure to enforce a patient to take a regular treatment. However by incessant and co-ordinated motivation of Para Medical Workers who stay in the villages the patients can be persuaded to take regular treatment. So in order to bring

¹ Report from the Director of Health Services and Family Planning Madras, dated August 12, 1975 for the Pudukkottai District Gazetteer.

² In a Foreword to *Mahatma Gandhi Answers the Challenge of Leprosy* by F. N. Jagadisan, 1965.

every patient under treatment, it is necessary to have a case detection programme for which the entire population is examined with a view to find out all cases of leprosy whether it is early or late and direct them to take regular treatment from the mobile medical team visiting their village, once or twice in a month. The Government of Tamil Nadu has done pioneering work in this matter.

The total number of estimated cases of Leprosy in Tamil Nadu is 7.5 lakhs. Of these 4.6 lakhs cases have been brought under treatment by the State Government's Units as part of its Leprosy Control Programme. According to report from the Director of Health Services and Family Planning, Madras, the estimated cases of Leprosy in the Pudukkottai district number about 10,000. About eight lakh persons in the district have been covered under Leprosy Control Programme's case detection scheme and treatment has been extended to 4,117 cases so far. Control Units of the Government are functioning in Pudukkottai and Arantangi towns¹.

Under the special Rehabilitation Programme for leprosy beggars which was inaugurated on 3rd June, 1971, ten Rehabilitation Homes of Leprosy beggars have been established in this State. The Government Rehabilitation Home in the Pudukkottai district, which was opened on 7th January 1973, is one of the ten. The cost of its construction was about Rs. 10 lakhs. It has accommodation for 400 adults and 25 children.

The present, strength² of the Rehabilitation Home is as follows :—

<i>Male.</i>	<i>Female.</i>	<i>Children.</i>	<i>Total.</i>
287	86	44	417

The object of the Home is to treat beggars suffering from leprosy and rehabilitate them so that when they are discharged from the Home, they can lead a life of self-dependence. The Home has been

¹ Report of Director of Health Services and Family Planning, Madras, 19th January 1976.

² Report from the Director of Health Services and Family Planning, Madras, dated 19th January 1976 for the *Pudukkottai District Gazetteer*.

provided with facilities for medical, surgical, physiotherapy treatments. It has a surgical operation theatre where surgery on claw hands, drop foot and other physical defects which are characteristic of leprosy is done.

Patients can be admitted in the Home along with their wives. Arrangements have been made for the admission of their healthy children in nearby schools and hostels. The Home provides free board, lodging and clothing to these patients. The inmates are given free medical treatment and also vocational training. Radios, a set of musical instruments, and facilities for indoor and outdoor games are provided to them.

The vocational training provided includes farming, poultry-keeping, tailoring, shoe-making, carpentry. An envelope-making unit is also being set up. The inmates are paid Rs. 1 to 2 per week depending upon work done every week. For the purpose of rehabilitation back into their families, a professionally trained social worker has been appointed.

Other Diseases.—7,001 cases¹ of tuberculosis were treated in the district in 1974 under the Tuberculosis Control Programme. Out of Rs. 57.80 lakhs spent in Tamil Nadu on Tuberculosis Control in 1974-75, Rs. 91,237 were spent on tuberculosis control in the Pudukkottai district. Out of the (roughly) 7.4 lakhs Tuberculosis cases in Tamil Nadu there are about 18,000 cases of tuberculosis in the Pudukkottai district.

At present the District Tuberculosis Centres, Tiruchirappalli and Thanjavur look after Pudukkottai district. While the District Tuberculosis Centre, Tiruchirappalli covers Kulattur, Alangudi and Tirumayam taluks in Pudukkottai district, the District Tuberculosis Centre, Thanjavur, covers Arantangi taluk in Pudukkottai district. In all 29 peripheral Health Institutions (like Government Hospitals, Primary Health Centres, Government Dispensaries, etc.) in Pudukkottai district are taking part in the Tuberculosis Control Programme. The District Tuberculosis Officers, Tiruchirappalli and Thanjavur districts visit these peripheral Health Institutions to supervise

¹ Report from the District Medical Officer, Pudukkottai, dated 16th August, 1975.

the work done under the Tuberculosis Programme and supply necessary Anti Tuberculosis drugs. Case finding by sputum examination and domiciliary treatment to all the detected cases from the main activities of these peripheral Health Institutions.

The chest clinic attached to the District Headquarters Hospital, Pudukkottai is equipped with X-ray and Microscope facilities. Symptomatics from various parts of the district attend this Chest for diagnosis. Thus the clinic serves as a referral and treatment centre. On an average about 30 to 40 tuberculosis cases are detected and put on treatment at this clinic per month. As on date about 800 tuberculosis cases are under treatment at Chest Clinic, Pudukkottai.

During 1954 to 1964 all the taluks in Pudukkottai district were also covered under the Mass B.C.G. vaccination campaign, but a house-to-house B.C.G. vaccination drive is yet to be launched in Pudukkottai district. The B.C.G. Team attached to the District Tuberculosis Centre, Tiruchirapalli is likely to take up Pudukkottai district for house-to-house B.C.G. vaccination shortly. At present new borns and children are given B.C.G. vaccination at the District Headquarters Hospital, Pudukkottai. About 200 children (including new borns) are being given B.C.G. vaccination at the District Headquarters Hospital, Pudukkottai every month.

Eight thousand eight hundred and fifty six cases¹ of sexually transmitted diseases were treated in the district in the same year. Patients of these two diseases generally belong to the underprivileged socio-economic classes.

The National Malaria Eradication programme has been implemented in the area from 1958-59 onwards. For the implementation of the maintenance phase of the programme an administrative division has been constituted under a Divisional Officer. The Divisional Officer works under the district supervision and control of the District Health Officer. Each Primary Health Centre has been strengthened for this task and other basic health functions by establishing basic health services attached to the Primary Health

¹ The figure has been obtained by totalling cases of congenital syphilis (11), early syphilis (1,372), other syphilis (3,158), gonococcal infection (4,315), furnished by the District Medical Officer, Pudukkottai, on 16-8-1975.

Centres There are 99 basic health workers, 16 basic health inspectors and 11 laboratory assistants working in these centres under basic health services. The number of malaria cases recorded¹ during the last five years from 1970 is given below :

Year.	Number of			Indigenous.	Imported.
		cases.			
(1)	(2)	(3)	(4)		
1970
1971	..	8	7	1	
1972
1973	..	1	..	1	
1974	..	27	17	10	

A study conducted by the Gazetteer Unit on Old Age Pensioners in the district revealed that diabetes, rheumatism and ophthalmic disorders affect a good percentage of the district's older generation.

The Administrative Reforms Commission set up by the Government of Tamil Nadu has observed in its Report (July 1974) on Health Services Administration : . . . "The system of medical education based on text books written in well developed countries concentrates on diseases prevalent in those regions. It does not seem to devote adequate attention to the most common diseases prevailing amongst the people which it seeks to serve. Filaria, Tuberculosis and Leprosy are the predominant diseases in our region and they are all easily communicable to others"². Surveys have shown that more than 60 per cent of the population in this State are constantly exposed to such diseases. Still, medical education as organised in this State has no special emphasis on them and the few who specialise in these diseases do not seem to receive adequate professional recognition. Medical education in order to be effective, has to be

¹ Report of Director of Health Services & Family Planning, dated 30th December 1975.

² Of leprosy, however, fears of infection are unscientific. Prof. T. N. Jagadisan writes in *All about Leprosy* (1948) : "Leprosy, like many other diseases is caused by a germ—the mycobacterium leprae. The disease is acquired by close and prolonged contact, mostly in childhood, with an infective case of leprosy. Not all leprosy is infective. Only about 25 per cent of cases are infective. But even these infective cases do little or no harm in casual contact. Moreover, the adult has a high resistance to the disease. Even those who are working in leprosy institutions and grown-up persons living in daily and intimate contact with infective cases seldom contract leprosy. The dread of infection by casual contact is wholly unjustified."

firmly rooted in the realities of the region and should prepare students to face them with hope and courage. For this, the Professors and students should go outside the walls of the College and be in touch with what is happening in the field".

MEDICAL AID.

The practice of modern medicine in Pudukkottai can be taken to have begun in 1851, the year of the inauguration of 'H. H. The Rajah's Hospital. The then Raja of Pudukkottai, Ramachandra Tondaiman, dedicated the hospital to the memory of John Blackburne, Political Agent for Pudukkottai and Collector of Madurai, in the years 1841-1847.

Tanjore, like other districts in Madras, had at the time a well-established medical unit, with a Residency Surgeon *et al.* Dr. Brooking then Residency Surgeon at Tanjore accordingly trained a nucleus staff for the new hospital at Pudukkottai¹.

Sir A. Sashiah Sastri, Diwan and Diwan-Regent of Pudukkottai for sixteen years from 1878 carried the process further by replacing, in 1879, the hospital's Apothecary by a full-time Assistant Surgeon, M.T. Singh, L.M.S., of the Madras Medical Establishment.

The hospital has not looked back since then. An Operation Room was constructed in 1906, two Operation Theatres in 1925-26 one of which was for septic operations, a Pathological and Bacteriological Section in 1930, a Radiological and Electrotherapy Section in 1935 and an Ear, Nose and Throat Section in 1936. 'H.H. The Rani's Hospital', opened first as a dispensary was converted into a hospital for women and children under a lady doctor in 1920.

The former State opened three rural dispensaries at Karambakudi, Viralimalai and Kilanilai in 1892-93. An Ayurvedic dispensary was opened in Pudukkottai town in 1920-21. In 1938 there were fourteen medical institutions in the Pudukkottai State.

A private hospital with 32 beds for women and children at Valayapatti was 'provincialised' during the year 1950. A T.B. ward with 24 beds was opened in the year 1960 in this hospital. A Government Hospital with 16 beds was opened at Arimalam

¹ Report on the Administration of Pudukkottai, 1878-79.

during the year 1963. A Panchayat Union Dispensary with 16 beds and buildings donated privately at Illuppur was provincialised with effect from 1st February 1971. Two new Government Hospitals with 10 and 16 beds each started functioning at Tirumayam and Alangudi respectively from September 1973.

A special wing for sexually transmitted Diseases was opened in the Town General Hospital in 1973.

With the formation of the Pudukkottai district in the year 1974 a district Medical Officer was posted and assumed charge from 8th March 1974. Consequent to the formation of the new District, the erstwhile Rajah's Hospital (Town General Hospital) and the Rani's Hospital at Pudukkottai have been amalgamated into one as the Government District Headquarters Hospital, Pudukkottai, with the erstwhile Rani's Hospital becoming the Maternity Wing of the District Headquarters Hospital.

A new 100 M.A. X-Ray plant sanctioned for the Government Headquarters Hospital, Pudukkottai has been supplied and is now under installation.

After the upgrading of the former Town General Hospital into a District Headquarters Hospital, no appreciable improvements have been made to the buildings though Medical and Para-Medical Staff have been posted. This increased staff are functioning in the limited building and with other facilities already in existence. There is a proposal to construct a 200 bedded Ward in this Hospital and a modern Kitchen. Only after proposals to construct

(i) an extension for the Block where the out-patients ward is functioning, to meet the present requirement.

(ii) a Non-Gazetted Government Officers' Ward with 10 beds; and

(iii) a Convict ward with 6 beds, have materialised, with the additional facilities essential for in-patient and out-patient treatment be complete.

The hospital has a bed-strength of 206 with a staff of 25 medical officers and 35 nurses. In 1974 about 1,67,062 outpatients with a daily average of 1,073 were treated in the hospital. Outpatients numbered 10,260 with a daily average number of 216. The Government of Tamil Nadu is planning a Tuberculosis Centre in Pudukkottai.¹

A Dental Wing was sanctioned to the Government Hospital, Arantangi, during the year 1974 and is yet to start functioning.

A Non-Gazetted Government Officers' Dispensary and a Siddha Dispensary were sanctioned for the Government Headquarters Hospital, Pudukkottai and have started functioning from 12th June 1974 and 20th September 1974 respectively.

A private dispensary at Rangiam and a Panchayat Union Dispensary at Gandarvakottai were provincialised during June and October 1975 respectively.

The Women and Children Hospital at Valayapatti was converted into a General Hospital for both men and women. A 10 bedded Male Ward opened at Valayapatti during June 1975.

A six bedded T.B. Ward in each of the Government Hospital, at Tirumayam and Kiranur are under construction and will start functioning shortly.

A Dental and a Siddha Wing sanctioned for the Government Hospital, Alangudi during 1975 is yet to start functioning.

A 12 bedded Ward for ex-servicemen has been sanctioned at the Government Hospital, Tirumayam and construction is yet to be started.

There are at present 42 medical institutions in the district. Apart from the Government Hospital in the district Headquarters, there are government hospitals being run at Arantangi, Alangudi, Keeranur, Iluppur, Arimalam, Valayapatti, Tirumayam, Karambakudi, Koppanappatti and Kilanilai. There are Government Dispensaries at Tirugokarnam, Mimisal, Manamelkudi, Panaiyappatti,

¹ Performance Budget for Health Services and Family Planning, Government of Tamil Nadu ; 1975-76.

Ponnamaravathi, Perungalur, Subramanyapuram, Rangiam and Avadayarkoil. There are Panchayat Union Dispensaries at Kanakamalam, Kottaippattinam and Krishnajibattinam. Rural Dispensaries are run at Vallavani, Silattur, Pilamangalam, Marapanaikkadu and Maramadakki. Primary Health centres are located at Malaiyur, Kadaiyapatti, Kariayur, Natchandupatti, Annavasal, Viralimalai, Andakulam, Nagudi, Tiruvonam, Tiruvarangulam and Ponpetti. Apart from these, the other medical institutions are the Leprosy Control Unit, Pudukkottai, the Ayurvedic Dispensary, Pudukkottai, the Siddha Dispensary, Pudukkottai, and the Government Borstal School¹, Pudukkottai.

The Administrative Reforms Commission set up by the Government of Tamil Nadu has observed in its Report (July 1974) on Health Services Administration: "All our hospitals are always over-crowded, the demands made by people on them being much larger than their designed capacities. . . .

The ultimate solutions to this problem can only be long term measures such as increasing the number of hospitals, controlling the spread of communicable diseases, improving the environmental sanitation and the nutrition standards of the people".

Medical relief is, of course, provided not only by Government medical institutions, but also by private nursing homes. Four private nursing homes operate in Pudukkottai town.

There are also other private practitioners in the district, representing other systems of medicine.

The late Dr. K. Lakshmana Sarma established a Nature Cure Sanatorium in Pudukkottai in 1941. In the same year he also started the Indian Institute of Natural Therapeutics. An English bi-monthly journal on the philosophy of nature cure with Dr. Sarma as its editor commenced publication to further the cause.

The Sanatorium is looked after now by L. Tyagaraja Sarma son of Dr. Lakshmana Sarma. This sanatorium is situated at Ganeshnagar, Pudukkottai in natural surroundings. There

¹ For an Account of the Borstal School, see chapter XII.

are five cottages here with open spaces all around to house patients in. Fresh vegetables and coconuts are grown for the use of patients. Each room is provided with a wooden cot and spinal bath tub. A naturopath is available for consultations and guidance all the 24 hours. Patients are encouraged to learn self-reliance in the matter of physical health.

The institution publishes from Pudukkottai a magazine entitled *The Life Natural* which carries articles from nature cure adherents in India and abroad.

Every pregnant mother who comes to a Primary Health Centre is given a health check-up that is designed to detect anaemia, toxæmia and malnutrition. A maternity centre is established for every 10,000 persons under the control of Panchayat Unions. These centres also administer to children the D.P.T. immunization against the communicable diseases of whooping cough, diphtheria and tetanus. The following figures show the progress of immunisation in the district under Maternity and Child Health Programme.

Annual figures of beneficiaries¹

Year.	Immunisation*			Iron Tab'lets.		Vita- min A Child- ren.
	TT	DPT	DT	Mo- thers.	Child- ren.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1970-71 ..	1,872	3,229	..	954	256	2,483
1971-72 ..	2,326	4,828	..	2,082	3,306	5,579
1972-73 ..	3,326	4,542	..	4,524	5,066	10,204
1973-74 ..	3,723	5,271	..	9,650	9,323	14,120
1974-75 ..	1,458	4,751	..	18,195	13,059	20,965
Total ..	12,705	22,621	..	34,405	31,010	53,351

*TT—Tetanus Toxide.

DPT—Diphtheria Pertussis Tetanus.

DT—Diphtheria Tetanus.

¹ Report of Director of Health Services and Family Planning, Madras.

Distribution arrangements for the CARE-operated feeding programme under which 1.25 oz. of skimmed milk powder reconstituted into 9 oz. of liquid milk are given to the beneficiaries, are also made through the Primary Health Centres and the Maternity and Child Health Centres of the Government and those attached to the Pudukkottai Municipality and Panchayat Union. In Pudukkottai district there are 64 such feeding centres, serving 2,280 beneficiaries.¹

The Primary Health Centres are responsible for administering the Government's special programmes for the prevention and control of communicable diseases such as malaria, small pox and cholera. They attend to school health ; problems of environmental sanitation ; health education ; family planning ; and miscellaneous programmes such as the prevention of food adulteration. In performing the latter task, Health Inspectors of the Primary Health Centres can act as Food Inspectors. At present in Pudukkottai district only the Karambakkudi Panchayat Union has been so empowered under the Food Adulteration Act. During fairs and festivals the Health Inspectors of the Primary Health Centres can act as Sanitary Inspectors to check sanitary arrangements with a view to prevent epidemics.

The Administrative Reforms Commission set up by the Government of Tamil Nadu in its Report (July 1974) on Health Services Administration has observed : "Primary Centres are the peripheral point at which medical care reaches the rural folk. It is far detached from the teaching centres where advanced methods of diagnosis and treatment are carried out. The eminent professors working in the teaching hospitals have no kind of link with these institutions. Consequently much of the Research work carried on in the teaching institutions are unrelated to the common diseases of the rural folk which are being tackled by the junior doctors in charge of the Primary Health Centres. The Medical Officer posted to the Primary Health Centres is generally fresh from the college where he has been taught how to diagnose diseases making use of various kinds of sophisticated facilities like laboratory tests, X-ray, ECG, and depending heavily on a team of medical and para-medical experts operating expensive equipments. It is from

¹ Report from the District Health Officer, Pudukkottai, dated 22nd August 1975, for the Pudukkottai District Gazetteer.

this highly specialised scientific atmosphere that he is suddenly thrown alone into the Primary Health Centre where he gets no aid whatever for diagnosis except perhaps a microscope. It seems obvious that he should be helped to deal with this bewildering situation... He must be enabled to feel that he is still part of the medical community and that he is backed by a team of medical experts."

SPECIAL SERVICES.

Family Planning.—The District Family Planning Bureau looks after the implementation of the Government's schemes for population control in the district. A District Family Planning and Maternity and Child Health Officer is in charge of the bureau. The duties of the bureau include the provision of facilities for undergoing vasectomy and tubectomy operations, and the adoption of other methods of contraception. The bureau offers besides advice on the medical termination of pregnancy, and arranges audio-visual publicity for family planning schemes. Up to the end of December, 1974, 22,855 vasectomies and 1,861 tubectomies were performed. A family planning drive conducted from January to March in 1975 resulted in 3,013 sterilizations.¹

The cases of voluntary sterilizations resorted to in Pudukkottai district from the inception of the scheme to 31st December 1974 plus the achievements in the January to March 1975 drive amount to 27,729. For Tamil Nadu as a whole, voluntary sterilizations until 31st March 1975 number 18,33,055. The statement below which gives the comparative achievement shows that the district has to catch up with the State.

<i>Sterilizations from inception to March 1975.</i>	<i>Pudukkottai district.</i>	<i>Tamil Nadu State.</i>
(1)	(2)	(3)
1. Vasectomy	25,616	15,48,859
2. Tubectomy	2,113	2,84,196
Total ..	27,729	18,33,055

Percentage to the total population 2.9 per cent. 4.4 per cent.

¹Report from the Director of Health services and Family Planning, Madras
99-5-46A

Prime Minister Nehru, no ordinary judge of rural psychology, said in his address to the Sixth International Conference on Planned Parenthood in New Delhi in 1959: "I address large rural audiences and almost always I speak of family planning to them, more to find out their reactions, because when addressing 50,000 or 100,000 people, one can only touch on the broad aspects of problems. It is interesting to watch their reactions. Those reactions were of amusement whenever I referred to this matter, general laughter in the audience and a certain shyness." This response of village communities to family planning extension is as true today as it was in 1959. The reaction is occasioned by a reluctance to expose a very personal margin of one's life to objective and open analysis. It therefore poses a considerable challenge to the agencies of extension.

Ophthalmic Care.—Surveys have shown that cataract is the most common cause of blindness in India and that its incidence is higher in this than in other countries. The Tamil Nadu Government has paid special attention to the cure of blindness by arranging for cataract surgery and the treatment of other ailments in the eyes in rural areas.¹

Surveys have indicated the prevalence of cataract in 2,250 cases in Pudukkottai District. Three eye camps have so far been conducted in which 78 cataract operations were performed and free eye glasses², given.

¹ Performance Budget for Health Services and Family Planning, Government of Tamil Nadu, 1975—1976.

² Report of Director of Health Services and Family Planning, Madras, dated 11th August 1975, for the Pudukkottai District Gazetteer.

CHAPTER XVII—OTHER SOCIAL SERVICES.

A basis change has overcome governmental ethos since Independence : from a 'law and order' government it has been transformed to a government that is concerned vitally with the welfare of its people. Several schemes designed to remove inhibitions and disabilities,—“the burden of the ages” as Rabindranath Tagore described them—have been set in motion by Government.

‘Social service’ has been defined as that activity of Government or individuals which is undertaken for the removal of social disequilibrium, whether between individuals, classes or groups. The magnitude of work that awaits solution is such as to make the efforts of individuals and voluntary institutions strictly secondary to those of Governments which have greater resources at their disposal. The evolution of the phrase ‘social engineering’ to denote a co-ordinated *putsch* towards this aim reflects this trend. This concern marks the planning and budgetary strategies of Government in the under-developed world, which appear to concede that a Welfare State can be built only upon a framework of vibrant social services.

In the following pages an attempt is made to describe some of the major achievements of Tamil Nadu in this direction, as reflected in the Pudukkottai district.

Prohibition.—The habit of using intoxicants is as ancient, almost, as human beings themselves. “In the Vedas, *soma ras* occurs frequently and without inhibition. The very word *ras*, which means juice suggests that our drinks had fruit, herb or cereal bases. Even remote tribals all over the country to-day use foodgrains, fruits, herbs or tubers as a base for their alcohol. In Mughal times, flowers, fruits, various spices and medicinal herbs and plants went into the distillation of the most popular drinks. The prescriptions were often enough compiled by leading Hakims and Vaidas. This also applied at lower social levels, sugar (*gur*) being the most popular base in the North and the coconut in the South. The tribal population mostly used millets or rice. It is, therefore, an established fact that in Indian society, before its invasion by Europeanised

society. alcoholic drinks were popular and contained an appreciable food and nutritional content and were least harmful and intoxicant. As such, hard drinks with a purely or substantially chemical base are a legacy of foreign influence.

When the British came, the so-called aristocracy enjoyed its drinks, still does, and was not embarrassed by it. The upper middle class drank either for the sake of its own pleasure and necessity or to keep up with the social standards of the Angrezi Sarkar. This was particularly true of the civil services, army personnel and such non-official elements who wanted to enter that section of society which could make inroads into the seclusion of the Angrezi Sarkar's recreational activities after office hours. Drinking amongst the lower middle classes was confined to 'occasions' because of the prohibitive price.

The worker and peasant classes drank frequently but cheaply. There was no other alternative for relaxing under-nourished limbs, and this led to large-scale consumption of locally distilled liquor, often injurious to health particularly in the growing industrial areas"¹

Prohibition has been designed primarily for the benefit of the latter category. Notwithstanding the rather paternalistic case for prohibition on moral and health grounds that is sometimes made out by individual prohibitionists, the chief aim of governments in implementing the programme has been pragmatic: economic relief for those classes of society whose earnings are barely higher than their expenditure on the necessities of life. The latest evidence of this concern is the twelve-point programme announced by the Government of India on the 2nd of October, 1975.

No Government that seeks to reduce the indebtedness and strengthen the purchasing power of the bulk of its population can remain a mute witness to the wasteful loss of hard-earned money at toddy and arrack shops. Their closure has been to bestow an immediate economic benefit to those who were its regular and steadily impoverished visitors.

¹ Seminar August 1964.

The closure of liquor shops has always meant the loss of excise revenue. It has never been an easy decision to take for Governments that have themselves been in economic straits. And yet prohibition has adopted by successive Governments in Tamil Nadu as a welfare measure of a very basic kind.

Its forerunner was the movement for temperance reform, which was launched in 1886 in the then Madras State. In the same year at the instance of some ardent temperance leaders like Hall Caine, the House of Commons passed a resolution condemning the excise administration of India. The resolution criticised the Government of India for establishing a large number of liquor and opium shops, thereby providing facilities for drinking among the rural and industrial classes. It also called upon the Government to take immediate steps to reduce drunkenness in India.¹

This cry for restrictions on drink resulted in some measures being taken in the rest of the country. But in the Pudukkottai State nothing worth mentioning was done to interfere with alcoholic consumption.

'Abkari'² was one of the important sources of revenue from the very beginning in the erstwhile Pudukkottai State. There was no definite public opinion against drinking. Sir. A- Sashiah Sastri³ took steps to effect improvements by placing Abkari under the control of the Deputy Karbar. The revenue derived by the Pudukkottai State from Abkari from 1871-72 to 1889-90 was as follows:—

Year.				Rupees.
1871-72	..	..	..	9,799
1872-73	..	..	..	10,253
1873-74	..	..	..	9,912
1874-75	..	..	..	9,670

1. Collection of papers relating to Excise Administration of India 1890 page 9.

2. Abkari, according to Wilson's Glossary of Revenue and Judicial Terms, is revenue derived from duties levied on the manufacture and sale of inebriating liquors, as *tari*, or *toddy*, arrack etc., and on intoxicating drugs. It is levied on certain licensed distilleries, or in fees for licences granted by the Collector to retailers. In some parts of South India, Abkari included duties on eating shops, gaming houses, itinerant tumblers, jugglers, and the like. The word is derived from the Hindi 'Abkar, a manufacturer or retailer of spirituous liquors,

3 Diwan and Diwan-Regent of Pudukkottai from 1878-1894.

<i>Year.</i>				<i>Rupees.</i>
187 ^a -76	..	..	..	11,034
1876-77	..	..	..	8,575
1877-78	..	..	..	5,918
1878-79	..	..	..	6,973
1879-80	..	..	..	10,223
1880-81	..	..	..	10,847
1881-82	..	..	..	12,664
1882-83	..	..	..	12,970
1883-84	..	..	..	14,719
1884-85	..	..	..	19,480
1885-86	..	..	..	Not known.
1886-87	..	..	..	20,531
1887-88	..	..	..	24,393
1888-89	..	..	..	26,187
1889-90	..	..	..	26,972

The Abkari system was re-arranged, resulting in an increase in the revenue from Rs. 27,730 in 1890-91 to Rs. 49,132 in 1891-92. The consumption of opium and ganja was also allowed in Pudukkottai State although there was only one shop, in the capital, for the whole State. While Pudukkottai continued to be 'wet' and its drink-revenue increased, the movement for temperance was gaining momentum in British India although Governments such as that in Madras resisted the movement.

Excise revenue increased by 221 percent in Pudukkottai between 1906-07 and 1920-21, whereas in the Madras Province the increase was only 167 per cent in the same period. In 1913, J.T. Gwynn, then Superintendent of Pudukkottai State, uttered a note of warning about the increase of Abkari revenue in the Pudukkottai Representative Assembly¹: "Abkari revenue has increased by 28 percent. If income is the only criterion this is, of course, satisfactory. But if the welfare of the people and their health are also kept in mind, this increase is far from satisfactory. It may be true that a portion of this increase is due to better Abkari-administration. But the rest is certainly due to an increase in the drinking of toddy and arrack."

¹ Translation of Tamil Quotation in *Sri Rajagopala vijayam* by Kameshwara Iyer, 1939.

In 1900 the Indian National Congress appealed to the Government to "pass measures like the Marine Liquor Law of America and Sir. William Lawson's permissive Bill or the Local Option Act" and suggested the imposition of an additional tax upon intoxicants not intended to be used as medicines.¹ The years 1906-1926 witnessed several measures being taken in British India to bring down the consumption of alcoholic drinks. These included (1) an increase in the rates of duty ; (2) a reduction in the number of shops ; (3) a restriction on the location of shops ; (4) a limitation on the hours of sale ; (5) temperance teaching in schools ; and (6) the providing of 'substitutes' like tea, coffee, etc. But, predictably, these efforts did not bring down the consumption of alcohol. The Congress demanded, thereupon, a complete closure of drink shops.

The authorities in British India maintained that a closure of shops would not solve the problem because of the abundance of illicit supply. But the Congress continued its agitation for the complete introduction of prohibition.

In July 1937, the Congress assumed office in the Madras Presidency under the scheme of Provincial Autonomy. The new Ministry of C. Rajagopalachari got a prohibition Act passed within two months of its assumption of office. This dry law was introduced to start with in Salem District from the 1st of October 1937. When the results were found encouraging, prohibition was extended to Chittoor and Cuddappah Districts in 1938 and to the North Arcot District in 1939. With the intervention of the Second World War, and the resignation of the Congress Ministry, the implementation of prohibition became problematic and Act XXII of 1943 was passed suspending the operation of prohibition. However, this suspension did not last long. In March 1946, when the Congress took office again, it re-introduced prohibition in eight districts: Salem, Chittoor, Cuddappah, North Arcot, Ananthapur, Bellary, Kurnool and Coimbatore, from the 1st October 1946. To the districts of Tanjore, Tiruchirappalli, Madurai, Nilgiris, Guntur, Nellore, Malabar and South Canara, prohibition was extended from the 1st October 1947. In the remaining nine districts, it was introduced on 1st October 1948.

¹ B. Pattabhi Sitaramayya in *The History of the Congress*, 1935.

In Pudukkottai State, with Gwynn's lead given in 1913 all but forgotten, members of the Representative Assembly introduced resolutions in favour of prohibition. But this time, Sidney Burn, the new Superintendent of Pudukkottai State was of another view. He opposed the move no sooner than it was made. The Pudukkottai People's Conference held in Pudukkottai Town on the 12th November 1920, under the presidentship of the veteran leader S. Satyamurthi passed a resolution calling for total prohibition in the Pudukkottai State'. Public opinion against drink found another expression in the fourth Pudukkottai People's Conference held in 1922 at Alangudi. But all these moves were in the nature of 'prayers, petitions and protests' from which nothing emerged.

In 1925, in fact, the then Chairman of the Municipal Council passed a resolution for the leasing out of coconut trees for tapping toddy.

S. Viswanatha Aiyar who opposed the resolution as a Member, resigned in protest. When, on the 13th December 1925, he was re-elected, his election was challenged. But in the re-election which was conducted subsequently he again won with a higher majority, which was an indication of public opinion against drink. In his presidential address to the sixth Pudukkottai People's Conference held in 1926, S. Satyamurthi requested the people of Pudukkottai and the Darbar to banish drink from the State. But these expressions of public opinion hardly had any effect on the Darbar's views. There was a continuous increase in the consumption of drink as also in the revenue from drink. The following figures indicate the increase in excise revenue.

<i>Year.</i>				<i>Excise Revenue.</i>
				RS.
1935-36	..	..	..	2,52,467
1938-39	..	..	..	2,91,903
1941-42	..	..	..	3,48,946
1942-43	..	..	..	4,59,599
1943-44	..	..	..	7,77,470

On the 21st September, 1927, Mahatma Gandhi in the course of a visit to Pudukkottai, spoke to the people of Pudukkottai about the need for complete prohibition. In 1946, when the question of introducing prohibition was raised again in the Pudukkottai Legislative Council it was stated that the matter would be considered when prohibition was introduced in the surrounding districts of British India¹. But when prohibition was introduced in the surrounding districts (Tanjore, Tiruchirappalli and Madurai) in 1947, the Pudukkottai Darbar did not keep its promise. It was only after the merger of Pudukkottai State with the Indian Union that prohibition could be and was introduced with effect from 1st July 1948.

Consequential arrangements were made for the amelioration of 400 ex-tappers. They were encouraged to engage themselves on a co-operative basis in running dairies, in the manufacture of palm jaggery and basket making.

Prohibition came to be suspended in Tamil Nadu with effect from August 30, 1971, by the Tamil Nadu Prohibition (Suspension of Operation) Act 1971.² Acute financial stringency forced the Government of Tamil Nadu to take this step. But the Government made it clear that what was being enacted was a law 'suspending' prohibition and not 'ending' it.

There were 69, 63 and 86 arrack shops in Pudukkottai District in the three years 1971-72, 1972-73 and 1973-74 respectively, when prohibition remained suspended in Tamil Nadu. There were 306 and 308 toddy shops in 1971-72 and 1972-73.

The revenue derived by the Government was—

		1971-72	1972-73	1973-74
		RS.	RS.	RS.
Arrack	..	58,830.00	1,84,870.00	3,22,576.00
Toddy	..	1,90,264.66	2,60,457.00	

Prohibition has been reintroduced in all the districts of Tamil Nadu including Pudukkottai from 1st of September 1974.

¹ The Hindu, dated 21st November, 1946.

² The suspension of the operation of the Prohibition Act was only with reference to liquor, its provisions being effective with regard to intoxicating drugs.

With this the domestic budgets of Pudukkottai's rural population as, indeed, that of the rest of Tamil Nadu, will get a much needed protection.

Prohibition has often been criticized on the ground that illicit business in alcohol has resulted from the legal suppression. It is even argued that the making of 'kalakkal' or other forms of illegally and unhygienically brewed alcohol has become almost a cottage industry after prohibition. But such criticism, apart from being grossly exaggerated, ignores the fact that illicit distillation thrives under excise also, and that the Excise Department prior to prohibition and in wet areas even now has had to contend with illicit distillation.

The rural population to-day is too large to be served by clandestine makers of the illicit stuff. The bulk of Pudukkottai's and Tamil Nadu's village population can confidently, therefore, be considered safeguarded from an expensive temptation. Rural women, who suffer the most from some of the socio-domestic effects of drink, are manifestly happy with the arrangement.

Women and Children.—Although the Indian woman has known an age when she enjoyed not only freedom from subservience to man, but a position of authority, her experience through the ages has been one of exploitation and neglect. With the rise of nationalist aspirations and the growth of parallel movements for the emancipation of discriminated sections, a beginning has been made in the removal of her disabilities.

Two quotations from the book¹ *Indian Women* are pertinent to the discussion on the women and children of Pudukkottai that follows:—

“The first Indian Woman to enter into active politics and live to see India attain freedom was Sarojini Naidu. She fulfilled the many concepts of political leadership in India. The

¹ Brought out by the Publications Division of the Government of India on the occasion of the International Women's Year, 1975, it has been edited by Devaki Jain.

fact that she left home, husband and children to identify herself with the movement for freedom had a tremendous impact on women in determining their future participation in the national movement. In the early decades of this century women still lived sheltered lives. Yet we see that many women like Sarala Devi Choudharani, Sarala Ray, Lady Abala Bose in Bengal, Vidyagouri Nilkanth and Sharadaben Mehta and Begum Hamid Ali of Gujarat, the Begum Mother of Bhopal and hosts of others, some known all over India and others respected in their own states like Sister Subbalakshmi and Dr. Muthulakshmi Reddy of Madras, and many other—their name is legion—were actively associated with educational and social work. Their sincere interest in the welfare of women has brought about a silent revolution and a good deal of the services have come to the women of the India through the unrecorded efforts of these great women.”

—*Lakshmi N. Menon.*

“The Census of India provides figures representing the proportion of cultivators and of agricultural labourers in the total agricultural work force. These figures show that women constitute a large though varying proportion of agricultural labourers in the different parts of the country. In general, their proportion is higher in the paddy-producing areas of East and South India than in the wheat-producing areas of the North. In some of the most fertile rice-growing districts of South India women actually outnumber men among the agricultural labourers. It is easy to be misled by lists of eminent women in the different walks of public life, but the basic social and economic conditions under which women live in the countryside have altered very little. Women work in the fields when they have to, and, when they do not, they are married away at a very early age much as they were in the past.”

—*Andre Beteille.*

(Born on the 30th July 1886, in Pudukkottai to a *devadasi* mother, Muthulakshmi Reddy was one of the first women in the country to receive, not without a struggle¹, school and collegiate education

¹ See under Chapter XV

becoming the first Indian woman to be graduated in medicine from Madras University. When in 1929, the Woman's Indian Association in Madras brought to bear great pressure on the Government of Madras to nominate a woman member to the Madras Legislative Council, Dr. Muthulakshmi Reddy was given the privilege of becoming the first Indian woman legislator. She was instrumental in the abolition by law of the pernicious and exploitative practices associated with the *devadasi* system. During the civil disobedience movement, Dr. Reddy resigned her membership of the Council to devote her time and efforts to the task of national regeneration. She founded, in course of time, the Ayyai Home at Adyar, a pioneering institution for the benefit of the destitute and rescued women, as also the renowned Madras Cancer Institute. Her massive achievement is, in a sense, an achievement of Pudukkottai.)

But the woman in Pudukkottai's farms meets the description given by Andre Beteille.

There are 4.76 lakh women in Pudukkottai district, forming 50.3 per cent of the district's total population of 9.47 lakhs. Of these, 4.19 lakh (88 per cent) live in rural areas, and 57 thousand (12 per cent) in towns. The district's 4.76 lakh women have among them a little under 76 thousand women from the Scheduled Castes and about one hundred and fifty women from the Scheduled Tribes.

4.24 lakh women or 86 per cent of the total number of women in the district have been classified as 'non-workers', in the Census of India, 1971. Household duties (no ordinary chore) account for most of these non-working women. The figure for non-workers includes, of course, female children and old or infirm women.

Over 52 thousand women, or 11 per cent of the total number of women in the district have been classified as 'workers' in the Census of India, 1971, 45 thousand of whom are engaged in agriculture. 51.6 per cent of the women in agriculture are owner-cultivators or tenant cultivators and 48.4 per cent agricultural labourers.

The district's workers women *not* in agriculture are :

(Census of India, 1971.)

<i>Occupation.</i>	<i>Number.</i>	<i>Percentage to total women workers.</i>	<i>Percentage to total number of women in district.</i>
(1)	(2)	(3)	(4)
1 Live-stock, Forestry, Fishing, Hunting, Plantations, Orchard and allied activities ..	700	1.33	0.15
2 Mining and Quarrying.	137	0.26	0.03
3 Manufacturing (household and non-household)	1,409	2.68	0.30
4 Construction	272	0.52	0.06
5 Trade and Commerce	1,063	2.02	0.22
6 Transport, Storage and Communication	113	0.22	0.02
7 Other Services	3,495	6.66	0.73
Total ..	7,189	13.69	1.51

One in every six women is 'educated' in the district. The corresponding ratio for men is much more favourable; approximately 2 : 3.

These preponderant rural women, the bulk of them devoted to running the home and rearing children, many of them working on farms, some in retail shops, in cottage industries, mines and quarries, are at the receiving end of the services of the Government's Department of Social Welfare.

The Director of Social Welfare is the Head of the Department at the State level, and is assisted by a Joint Director and one Deputy Director. There are three special Officers, one for child welfare and, two for special Nutrition Programmes. At the District Level, one District Women's Welfare Officer is incharge of all departmental programmes.¹

The activities of the Department aim at the promotion of the social, economic and cultural status of women. They seek mainly to improve the conditions of literacy, health, home life, economic activities, recreation and citizenship training for women and children. With this view, advice on health, hygiene, maternity and child welfare is imparted to women. They are also given training in some cottage industries and other home crafts, so that they can improve their economic condition.

Among the various measures taken by the Government for women's welfare, Women's and Children's Programme and Composite Programme are important. The first is implemented in 26 blocks in the district, each of which has been allotted Rs. 4,000 per year. The second programme aims to implement, through the existing Mahalir Mandrams and Kuzhandaigal Kappagams, the following three schemes:

(i) Nutrition Education through Mahalir Mandrams : Ponn-amaravathi, Viralimalai, Avadayarkoil and Tirumayam blocks have been selected for the implementation of this scheme. Three sets of kitchen equipment are also supplied in each block, through the Tamil Nadu Handicrafts Development Corporation.

(ii) Encouragement of Economic Activities of Mahalir Mandrams : For promotion of activities undertaken on a group basis awards are given to three select Mahalir Mandrams, every year.

(iii) Associate Women Worker Training : Sponsored by Central Government, this scheme aims to train the conveners of Mahalir Mandrams in child care, economical way of living, Health, Hygiene, Sanitation, Agriculture, etc.

¹ Welfare programmes for women and children and physically Handicapped 1974-'75, Government of Tamil Nadu, Social Welfare Department 1974, Page 1.

The Pudukkottai District does not have a women's welfare 'branch' at present, but there is a proposal to start one at an estimated cost of Rs. 11,460¹. When such a 'branch' is started in the Pudukkottai District it will undertake pre-basic classes and house visits to educate the women in household arts, nutrition and child care.

Work centres that train the women in simple cottage industries have been set up by the department to enable the rural women supplement their incomes, or those of their husbands. In the Pudukkottai District there are three centres situated at Pudukkottai, Annavasal and Tiruvappur. In the work centre at Pudukkottai women are trained in tailoring. The sanctioned strength is 20 and so far 80 women have benefited. In the Annavasal work centre, training is imparted in the making of palm leaf articles. It accommodates 15 trainees per session and so far 45 women have been trained in it. In the Tiruvappur work centre, training is given in bamboo basket making. The strength of this centre is 15 and a total of 60 women have been trained in it. The duration of the course is one year. After 3 or 4 batches have been trained in a work centre, the centre is converted into a Production Unit, employing the trained women and paying them wages according to the turnover.

नमो भगवते वासुदेवाय

In Tamil Nadu, a pre-school programme is in force from 1962 onwards which serves the twin purpose of aiding rural women and children of the pre-school age group. Rural women who are employed are relieved from the anxiety of looking after their children during working hours and, simultaneously, the programme inculcates school-going habits in the pre-school children in its care. There are, in 1975, 2592 pre-schools in Tamil Nadu State including the 50 pre-schools in harijan colonies constructed by Harijan Housing and Development Corporation during 1975-76.

¹ Report of State Planning Commission, Madras, dated 21st October, 1975. But this should not be taken to mean that the Department has no administrative unit in the district. Such a unit was started in January 1974, and co-ordinates the Department's activities within the district.

The following table shows the details of pre-schools run in Pudukkottai District :—

<i>Name of the Block.</i>	<i>Ordinary Pre-school.</i>	<i>Child Welfare Centres.</i>	<i>Pre-school in Harijan Colonies.</i>	<i>Total.</i>
(1)	(2)	(3)	(4)	(5)
1 Tirumayam ..	..	3	..	3
2 Annavasal ..	..	5	..	5
3 Virallmalai ..	..	4	..	4
4 Ponnamaravati ..	1	4	..	5
5 Avudayarkoil ..	2	..	..	2
6 Arimalam ..	5	..	1	6
7 Tiruvarankulam ..	..	..	1	1
8 Kunnandar Koil ..	..	..	1	1
Total ..	8	16	3	27

Out of 27 pre-schools 8 are ordinary pre-schools with 40 children in each pre-school and 16 child welfare centres with 60 children in each. The remaining 3 schools are to be started in Harijan Colonies. All the schools have feeding programmes, with 70 beneficiaries in each centre. Under the feeding programme 'Balahar' given by the assistance of CARE is supplied to the children at the rate of 80 grammes per beneficiary for 300 days in a year. Towards non feed charges 4.5 paise per beneficiary per day is also given as Government grant.

In the ordinary pre-schools bala sevikas are paid a monthly honorarium of Rs. 75. They are assisted by Ayahs who are paid Rs. 30 per month. These bala sevikas have passed the S.S.L.C. and are local candidates who have received training in pre-school programme. Organisers appointed in the child welfare centres get an honorarium of Rs. 100 per month. Child Welfare Organisers, are also 'S.S.L.C. passed' candidates who have received two months institutional training in Child Welfare programmes.

Kuzhanthaigal Kappagam Feeding Programme.—The Kuzhanthaigal Kappagam Feeding Programme is another programme of similar nature. The objective is to provide nutritious food to vulnerable groups during crucial periods, of growth and recuperation, concentrating on children below 5 years and nursing mothers. The scheme aims at feeding 1,20,000 beneficiaries for 300 days in a year in 1,000 Kappagams functioning in 92 Blocks in Tamil Nadu. In each of these centres, 40 pre-school children attending the Kuzhanthaigal Kappagam, 40 other children between 6 months and 5 years of age and 40 pregnant and nursing mothers are given food materials viz. CSM and salad oil at the rate of 80 grams and 10 grams per day per beneficiary by CARE. In 1973-74 there were only 68,000 beneficiaries. At the present the feeding programme is implemented in 1,265 Kuzhanthaigal Kappagams in 105 Blocks covering 1,20,000 beneficiaries. For the year 1975-76, the budget provision is Rs. 15 lakhs in the state of which the provision for Pudukkottai District is Rs. 9,000 for the operation of the scheme.¹ The scheme is in operation only in Karambakudi Block and feeding is arranged in following centres with 120 beneficiaries for each centre.

- | | |
|-------------------|------------------------------|
| 1. Karambakudi. | 6. Elaikadaividuthi. |
| 2. Melaiyur. | 7. Banduvakottai. |
| 3. Theethampatti. | 8. Pathuthakku. |
| 4. Pilaviduthi. | 9. Thattamanipatti. |
| 5. Kattathi. | 10. Therkkupallavarampathai. |

The Muthulakshmi Reddy Mahalir Illam is the only private organisation in Pudukkottai District running a home for adult women. It was started in 1955, with thirteen inmates. The inmates are given tutorial coaching for the S.S.L.C. examination. They are, besides, trained in tailoring, printing and type writing. There are now 56 inmates in the Illam. So far about 800 women have benefited from the services of the Illam. The institution is partly financed by the Central Social Welfare Board². The Tamil Nadu Government has also sanctioned Rs. 27,800 for running a secretarial course in this institution.

¹ Report of Joint Director of Rural Development, Madras, dt 29th December 1975.

² Report of Brindadevi, founder of Dr. Muthulakshmi Reddy Mahalir Illam Pudukkottai, dated 1st October 1975.

A special scheme for the welfare of the destitute, widows and deserted wives in the age group of 18 to 45 years is the grant to them of leg operated sewing machines. Thirty-nine such women had been benefited under this scheme in Pudukkottai District¹, until ~~January~~ August, 1975.

An orphan home called the Karunai Illam has recently been established in Tirumayam in Pudukkottai District for destitute children between the age group of 5 to 10 years to provide free board, lodging and educational facilities. This is part of a State wide programme for the setting up of Karunai Illams launched by the Chief Minister of Tamil Nadu Dr. Kalaignar Karunanidhi. At present, there are 38 boys in the home. The institution is administered by the Executive Officer, Pudukkottai Devasthanams. Seventy five percent of the expenditure of this Illam is borne by the Hindu Religious and Charitable Endowment, and the remaining twenty-five per cent by the State Government².

In her introduction to *Indian Women*, Devaki Jain observes ".....some of those who are doing research in hormones and behaviour suggest that the physiological apparatus does influence aptitudes, the quality of emotional needs and expressions. Women have certain special structures because they create and deliver a complete organism—namely, a baby. This biological function of procreation of the race develops in her certain reflexes and aptitudes. Characteristics like softness and warmth of the female body may be playing a satisfying role for the infant. These features of the women's body are consequential to the hormonal milieu of the female. Sensory signals arising from suckling and physical contact with the baby, provide gratification and a sense of fulfilment. It is suggested that the patience and sense of achievement so obtained goes a long way to make her better adaptable to social stresses." But this 'specialization', has led to the rural women being not merely house bound but becoming a prisoner of anxieties and work for unwanted and under nourished children. (The categorization of such mothers and housewives as 'non workers' is, to that extent, quite ironic.) This situation which is generally traceable to the lack of concern and irresponsibility of the men, can

¹ Report of District welfare Officer, Pudukkottai, dated 14th August 1975.

² Ibid.

be remedied not by attempts to replace the rural women's 'Sita image' with a 'lib image' but, among other socio-legal steps, by a recognition of the distinctive features of womanhood and an identification of its advantages. A vigorous extension of welfare schemes for women and children, if accompanied with paramedical aid and advice, can help rural women in a district like Pudukkottai to come into their own. More and more of them with their sons and daughters, will then be in a position to utilize the educational, technological and employment opportunities that are becoming increasingly available for men and women alike.

Harijan Welfare.—Mahatma Gandhi named the so called 'outcastes' of the Hindu Community, 'harijans', meaning thereby god's own children. His intention in suggesting this name as substitute for various colloquial equivalents of the word's 'out caste' and 'untouchable' was to alter fundamentally Hindu society's attitude to members of this discriminated section. In the years 1932 to 1934 he undertook a vigorous programme for the eradication of untouchability which included, apart from propaganda against the custom, the opening of temples and roads to Harijans thus far closed to them, the extension of education to Harijan children, and the devising of more dignified means of work for Harijans. He launched a journal *Harijan*, in February, 1933, which was dedicated to remove untouchability "root and branch". Rabindranath Tagore supported the Mahatma's programme eloquently, exhorting the people to remove what he called "the burden of the ages, the burden of disrespect upon the bent back of those who have been stigmatized for the accident of their birth" ¹.

During their terms of office, Congress Ministers from 1937 to the beginning of the war removed many of the 'legal' disabilities against the harijans. While the province of Madras like the rest of the country responded enthusiastically to the programme, throwing open temples one after another, Pudukkottai was out of step. There was insufficient awareness within this 'native' States of the harijan problem. The Thirumayam-born Congress leader S. Satyamurthi was among those few who spoke² for an overhaul of *inter se*

¹ Quoted in Mahatma (Volume III) by D.G. Tendulkar.

² At the Pudukkottai State People's Second Conference, 12—11—1920.

relations among the people, if *swaraj* from foreign rule was to be desired. The passage of the Madras Removal of Civil Disabilities (Amendment) Act XI of 1947 and the Madras Temple Entry Authorisation Act V of 1947 in the Madras State conferred on harijans equal rights of access with other citizens to all places of public resort such as theatres, hotels, hostels, public wells and Hindu temples. It was only in 1948, on the eve of its merger with the Union that the Darbar issued a proclamation stating that all public temples within the State should be opened to Hindus of all classes without discrimination. Article 17 of the Indian Constitution has prohibited the practice of untouchability in any form. Untouchability has been declared an offence by the Untouchability (Offences) Act of 1955.

Successive Governments of Tamil Nadu have implemented schemes for harijan uplift. A separate department to look after the welfare of Scheduled Caste and Scheduled Tribe was formed in the year 1949 with a (honorary) Director as the head of the Harijan Welfare Department. At the secretariat level, the work was attended in the Rural Welfare Department. Subsequently it was attached to Industries, Labour and Co-operation Department. Then it was attached to Home Department with the nomenclature 'Social Welfare Department' was formed. The Department of Social Welfare in the Secretariat administers the Government's programmes of harijan welfare, through the agency of a Director of Harijan Welfare. This officer co-ordinates the operation of special schemes formulated by Government for the benefit of harijans and implemented in the rural areas by the District Collectors with the assistance of District Welfare Officers.

According to the Census of India 1971, there are 7,315,595 persons belonging to the Scheduled Castes¹ in Tamil Nadu, forming 17.76 per cent of the total population of the State. Pudukkottai district has 1,51,294 persons belonging to the Scheduled Castes and 278 persons belonging to the Scheduled Tribes, forming 15.97 per cent and 0.03 per cent, respectively, of the total population of the district².

¹ The 'untouchables' have been listed by the Constitution of India in a schedule contained in it. So also certain 'tribes'.

² Census of India 1971.

The following table shows the population of Scheduled Castes and Scheduled Tribes in the taluks of Pudukkottai District.

Name of Revenue Division/ Taluk/Firka/Municipalities.	1971 Census population.			Percentage of.	
	Total.	SC.	ST.	SC.	ST.
(1)	(2)	(3)	(4)	(5)	(6)
PUDUKKOTTAI REVENUE DIVISION.	7,38,390	1,26,026	176	17.07	0.02
(1) Kulattur Taluk, (2) Alangudi Taluk, (3) Pudukkottai Taluk and (4) Tirumayam Taluk.					
1. KULATTUR TALUK	2,14,904	83,351	..	17.85	..
i. Narttamalai Firka ..	32,561	6,817	..	20.94	..
ii. Illuppur Firka	20,326	6,569	..	21.66	..
iii. Kudumiammalai Firka	24,462	5,620	..	22.97	..
iv. Keeranur Firka ..	31,606	4,168	..	13.18	..
v. Kunnandarkoil Firka	21,405	2,882	..	13.46	..
vi. Viralimalai Firka ..	45,067	8,213	..	18.22	..
vii. Neerpalani Firka ..	29,477	4,082	..	13.84	..
2. ALANGUDI TALUK ..	1,61,441	27,870	33	17.26	0.02
i. Alangudi Firka	39,943	4,732	..	11.84	..
ii. Karambakkudi Firka ..	31,125	8,496	..	27.30	..
iii. Malaiyur Firka	31,907	6,870	32	21.53	0.1
iv. Vallanad Firka	29,004	4,942	..	17.04	..
v. Keeramangalam Firka ..	[29,462	2,830	..	9.60	..
3. PUDUKKOTTAI TALUK	1,64,602	28,576	..	17.36	..
i. Pudukkottai Firka ..	83,114	10,555	..	12.70	..
(a) Pudukkottai Municipality.	66,384	5,403	..	8.14	..
(b) Other areas	16,730	5,152	..	3.08	..
ii. Varappur Firka	29,242	5,255	..	17.97	..
iii. Kallakottai Firka ..	22,685	5,295	..	23.34	..
iv. Gandharvakottai Firka	29,561	7,471	..	25.27	..

SC=Scheduled Castes

ST=Scheduled Tribes.

Name of Revenue Division/ Taluks/Firkas/Municipalities	1971 Census population.			Percentage of.	
	Total.	SC.	ST.	SC.	ST.
(1)	(2)	(3)	(4)	(5)	(6)
4. TIRUMAYAM TALUK ..	1,97,443	31,229	143	15.82	0.07
i. Tirumayam Firka	29,521	5,988	..	20.28	..
ii. Virachilai Firka	31,394	5,355	88	17.06	0.28
iii. Songirai Firka	33,745	5,112	4	15.15	0.01
iv. Keelanilai Firka	26,223	3,633	..	13.85	..
v. Ponnamaravathi Firka ..	47,405	5,064	51	10.68	0.1
vi. Karaiyur Firka	29,155	6,077	..	20.84	..
II. ARANTANGI REVENUE DIVISION.	2,08,961	25,268	102	12.09	0.05
(5. Arantangi Taluk only)					
5. ARANTANGI TALUK ..	2,08,961	25,268	102	12.09	0.05
i. Arantangi Firka	33,478	4,344	5	12.98	0.01
ii. Arasakulam Firka	36,958	2,903	81	7.85	0.22
iii. Athani Firka	13,759	2,432	..	17.68	..
iv. Silattur Firka	34,493	2,102	5	6.09	0.01
v. Avadayarkoil Firka	19,787	3,802	..	19.21	..
vi. Ponbethi Firka	14,745	2,626	..	17.81	..
vii. Mimisal Firka	22,045	2,712	..	12.30	..
viii. Manamelkudi Firka ..	33,696	4,347	11	12.90	0.03
District total ..	9,47,351	1,51,294	278	15.97	0.03

Among welfare measures adopted, the Government of Tamil Nadu has given priority to the education of harijans. The policy of the Government has been to get harijan students admitted into schools already existing in a locality and also to open separate schools for them in places where there are no schools at all. The enactment of the Removal of Civil Disabilities (Amendment) Act of 1947 has conferred equal rights on harijan children for admission into all educational institutions.

There are four Harijan Welfare Primary Schools and one Harijan Welfare Middle School in Pudukkottai district. Five Single teacher schools have also been opened in the district. Provisions are made in these institutions for mid-day meals, the distribution of clothing to poor harijan children, free books and slates. The children of other 'forward' communities are provided mid-day meals along with the harijan children. The provision of mid-day meals has resulted not only in the increase of attendance in schools but has also had a good effect on the health of these children. The Government has provided a number of scholarships and 'boarding' grants in order to encourage harijan education. The offer of scholarships ranges from study in elementary classes to professional courses like medicine, engineering, law, etc. Education in all Elementary and Secondary Schools both under public and private managements is imparted free to harijan children, irrespective of their parents' income. Harijan students are granted concessions in the payment of fees in Arts and professional colleges, if their parents income do not exceed certain specified limits.

In the Pudukkottai District four types of scholarships are being given to harijan students. Students from the scheduled castes and scheduled tribes pursuing post-matric courses are sanctioned scholarships under Government of India regulations. The maximum income limit for the award of this scholarships is Rs. 9,000 per annum which is sanctioned by the District Welfare Officer. During 1974-75 about 333 students have been sanctioned this scholarship in the district, the amount involved being Rs. 1,85,183-00¹. State scholarships were awarded to 3,518 pre-matric students in 1974-75, at a cost to the State for Rs. 73,916-50. The Government also grants loan scholarships which are repayable in easy monthly instalments and are interest free, without any consideration of the income limits of parents. In 1974-75, twenty students were granted loan scholarships of the value of Rs. 6,000 in the Pudukkottai district. A Gandhi Memorial Scholarship is awarded to the student from the Scheduled Caste who secures the first rank in the pre-university course in the district. In Pudukkottai in 1974-75 one boy was awarded this scholarship.

¹Report from Director of Harijan Welfare, Madras, dated 24th May 1973.

Besides, special hostel facilities and board grants are also provided.

There are 14 boys and 3 girls hostels in Pudukkottai district. There were 954 inmates in these hostels during 1975. There is one hostel for college students in Pudukkottai Town with a strength of 200 inmates. The following are the Government hostels in the District for members of the Scheduled Caste and other communities eligible for this facility.

	<i>Strength.</i>
1. College Boys Hostel, Pudukkottai	200
2. Arantangi	44
3. Gandharvakkottai	33
4. Kumaramangalam	50
5 Alangudi	122
6. Tirumayam	69
7. Keeranur	130
8. Ponnamaravathi	100
9. Arimalam	43
10. Karumbakudi	30
11. Pudukkottai	66
12. Embal	50
13. Malaiyur	30
14. Annavasal	30
15. Vettanvaidhuthi	30
16. High School Girls Hostel, Pudukkottai	97
17. High School Girls Hostel, Keeranur	30
18. High School Girls Hostel, Illuppur	30

students of other communities are also admitted in these hostels upto a specified percentage of the total strength in order to accelerate the removal of untouchability.

Next to education the Government has given a high priority to the provision of housing for the harijans. Harijans are provided with house-sites both by assignment of poramboke lands and by

the acquisition of private lands. House-sites are given free of cost to all harijans except those who have resources to pay. Each family is assigned an extent of 3 cents in wet areas and 5 cents in dry areas.¹ Besides, lands for the construction of common streets, paths and lanes are also provided. The Government has acquired 9.02 acres of land in the district for the construction of 92 houses for harijans and has allotted Rs. 2,00,000 for the purpose. Rs. 50,000 have been sanctioned towards the acquisition of land for house-sites in 1975-76. In 1974-75, 13 drinking water wells were sunk at an expenditure of Rs. 42,978.

Measures are also taken towards the economic uplift of harijans which include the assignment of land for cultivation, encouragement of handicrafts and cottage industries and the organisation of co-operative societies.

Besides lands for cultivation, grants are also given to Harijans for the purchase of seeds, agricultural implements, etc. Plough animals are distributed free. In Pudukkottai district 9 pairs of bulls were given (in 1974-75) the amount spent thereon being Rs. 5,400. Facilities are given to harijans for the starting of cottage industries like basket making, poultry-keeping, bee-keeping, mat-weaving etc. One co-operative Harijan Milk Supply Society at Mattur is functioning with a view to improve the economic condition of the local harijans. Loans are granted to them to start small trades under the 'Trade Loan Scheme.' This loan is given free of interest and is repayable in 100 equal monthly instalments. In 1974-75, four harijans were sanctioned a loan of Rs. 1,875 for such trades in Pudukkottai district.

Harijans are given preferential treatment and concessions in recruitment to public services and admission to educational institutions². The Constitution had originally granted these concessions for 10 years but the period has been extended.

¹ The term 'wet' and 'dry' denote irrigated character of the area.

² The percentage of reservation of seats for admission into educational institutions and for recruitment to public service is 18% for scheduled castes and Scheduled Tribes.

The Government also provides legal assistance to needy harijans. Gold medals are awarded to couples who marry inter-caste, with a certificate of appreciation. This scheme is being implemented from 1968-69. The harijan spouse is eligible for an assignment of house-site of 3 cents and a cash grant of Rs. 200 for establishing the family.

On the 28th of February and 30th of every month, meetings and health campaigns are conducted in harijan areas. Every year a 'Harijan Week' is observed in the month of January on a State-wide basis. 'Harijan Welfare-Propaganda' is carried on throughout the State during this period. These activities have resulted in an advancement of the cause.

Speaking in the Constituent Assembly at the third reading and adoption of the Constitution of India, B.R. Ambedkar, that intrepid fighter for the emancipation of India's depressed classes, said: "We must make our political democracy a social democracy as well. Political democracy cannot last unless there lies at the base of its social democracy. . . . On the social plane we have in India a society based on the principle of graded inequality which means elevation for some and degradation for others. On the economic plane we have a society in which there are some who have immense wealth as against many who live in abject poverty". He asked the House: "How long shall we continue to live this life of contradictions?"

With legal safeguards and specific measures for welfare becoming increasingly available to harijans, their complete freedom from "the burden of the ages" is no longer a remote ideal but a realizable prospect.

Welfare of other Backward Classes.—In 1948-49, the welfare of other backward classes was looked after by the Commissioner of Labour and a scheme for the sanction of scholarships to students from the backward classes was started. The work was later entrusted to the Director of Harijan Welfare in 1949-50. In order to devote more attention to backward classes and 'denotified' tribes, a separate Directorate of Backward Classes was established on May 2nd, 1969, with a senior I.A.S. officer at its head under the control of the Chief Minister. The portfolio has now been entrusted to a cabinet minister in Tamil Nadu.

In Pudukkottai district there are the following backward classes listed : Ambalakarar, Gavarar, Kaikolar, Kailar, Kammalar, Kurumbar, Labbai, Maruthuvar, Muthuraja, Oddar, Parkavakulam, Uraligoundar, Valayar, Vannar, Vanniyakula Kshatriya, Yadhava. Educational Scholarships are provided for the children of members of backward classes for education. In Pudukkottai district, about 1,323 pre-matric scholarships and 567 post-matric scholarships were granted to backward classes students in 1974-75. The amount involved was Rs. 46,000 and 1,58,000 respectively.

Students from the 'denotified' tribes are also given scholarships. In 1974-75, 1,262 pre-matric (value Rs. 32,000) and 125 post-matric (value Rs. 48,000) scholarships were given to such students.

The Backward Classes Department runs free hostels for the students of these classes in the following places in the district, where there were 639 inmates in 1975 :—

	<i>Strength</i>
1 College Boys Hostel, Pudukkottai	175
2 College Boys Hostel (Additional), Pudukkottai ..	75
3 Boys Hostel, Ponvetti	40
4 Boys Hostel, Alangudi	40
5 Boys Hostel, Tirumangalam	50
6 Boys Hostel, Viralimalai	75
7 Girls Hostel, Arantangi	40
8 Boys Hostel, Gandharvakottai	50
9 Boys Hostel, Pudukkottai	44
10 Girls Hostel, Ponnamaravati	50
	<hr/>
	639

These communities have been the subject of study in 1971 by a Backward Classes Commission appointed by the Government of Tamil Nadu. Some of the observations of the Commission on these communities are summarised below:

Ambalakars are agricultural labourers, manual workers and village watchmen. Since the majority of the people are labourers they cannot educate their children.

Gavars or Kavars (originally people who sold bangles) work as coolies, mill-hands, and peons.

The Kaikolars are numerically, the biggest weaving caste in Tamil Nadu. The majority of these are engaged in their traditional occupation and some do trade in yarn and textiles. Extreme poverty, poor living conditions and the occupational hazards of their profession have had a noticeable effect on their health, particularly of the children.

In view of their fighting qualities, occasional gifted leadership and the presence of a few wealthy landlords amongst them in certain areas the Kallars are looked upon as a potentially powerful force. The misery and poverty of the ordinary people can be gauged by the emaciated and ill-clad appearance of the boys and girls in the reclamation schools, and the lower living standards in some of the villages where State-aided dwellings have been built for them. These people will require aid in several ways for some time to come.

Being an artisan class essential to the village economy, almost every big village has a few families of Kammalars to cater to the needs of the local population. In spite of its inclusion in the list of Backward Classes since a very long time it is deplorable that except for literacy in the local languages, much progress has not yet been made by the Kammalars.

The percentage of literacy among the Kurumbas (sheep-rearers and blanket-weavers) is said to be only one per cent. The carding, spinning and weaving of the wool sheared from the sheep are done by both men and women. Assistance for improving the breed of sheep and cottage wool industry is essential for them.

The term 'Labbai' was originally applied to new converts to Islam and extended further to such Muslims who performed minor ritual duties in mosques and darghas and at religious functions. After the Census of India, 1951, Labbais have had the benefit of the 25% reservation for 'backward classes'. Special attention has to be focused on the education of Labbai girls.

Maruthuvars are also known as Navithar, Pandithar and Melakkarakar. The women act as midwives and treat children's diseases. Some of them have been practicing the *siddha* form of medicine for generations.

There is no doubt that the Muthuraja community's educational advance and participation of Government services is very meagre compared to their population. They are mostly cultivators, small land owners and agriculture labourers. It is claimed that they are mainly a rural community and that their occupation is cutting and selling firewood, paddy cultivation and cooly labour. Muthuraja men also serve as village headmen or talaiyaris.

The Oddars are a settled people living in large numbers spread over in several districts and cannot be possibly regarded a 'tribe' even though, in view of their occupation, there are many Odda villages in mountainous areas and on foothills. All Oddars speak Telugu. Their main occupation is cutting stones, sinking wells, earth digging, construction, and work connected with road laying, bank or bund-making etc. Most of them do not get more than 15 to 20 days' labour in a month. They spend most of their earning in food and have not yet bestowed any attention to improve their standard of living or to educate their children. From the point of view of education, their achievement is the lowest among the 'most backward communities'. Some diversification of occupation is necessary to get them away from manual work for which competition from machinery is inevitable. The benefits of elementary education should be extended to them. Unless education—at least of the lower level—is spread amongst the younger generation this community will continue to remain one of the most depressed among the 'backward classes'.

Members of the Parkavakulam are predominantly agricultural by occupation, but are slightly more prosperous than the purely cultivating castes. This is reflected by the comparatively smaller number of agricultural labourers and coolies and the large number of small land holders and tenant farmers. Wherever they are they appear to be exercising a certain amount of influence in local politics. This is a comparatively prosperous agricultural community with a larger percentage of landholding gentry, having pretensions to a

higher social status. Though their economic condition is good and they have a fair amount of local influence they have not made equally adequate progress in education or in government employment.

Valayars have been in the list of 'backward classes' since 1913 and were included in the list of 'most backward classes' in 1957. They are a hunting caste. There is no doubt, therefore, about their low social and economic status. The difference between these people and the 'scheduled castes' is exceedingly thin and, in some areas, even partial untouchability is practised against them. Valayars as a class are at about the bottom of the 'most backward classes' in every respect.

The vannars have various branches or sub-castes among them and it cannot be said that they intermix. Their main occupation is washing clothes. They are in the list of 'most backward classes' and deserve to be given concessions and facilities on par with the 'scheduled castes'. In view of the scattered population there is very little capacity in them for uniting against social oppression and for demanding better wages.

The Vannia Kulakshatriyas, one of the largest cultivating caste in Tamil Nadu, have all the traits of a self contained group. Both men and women do manual labour. Weaving, mat making, fishing and rearing pigs are some of the occupations they resort to, besides manual labour. The community's progress in education is one of the lowest. Some of the worst living conditions are found in streets principally inhabited by these people.

A large proportion of the Yadavas live in what may be properly described as backward areas. Both men and women are engaged in traditional pursuits and even when some of them take to cultivating land, both men and women work as field labourers. Their main occupation is sheep-breeding and cattle-rearing.

Welfare of the Physically Handicapped.—The Tamil Nadu Government have embarked upon a scheme that promises to give new life to the physically handicapped. A survey was conducted in 1972, to assess the status of physically handicapped persons in the State

which covered rural as well as urban areas. The survey which was carried out by the Economic Analysis and Research Division of the Finance Department of the Tamil Nadu Government, revealed that in Pudukkottai district there were 3,243 male and 2,456 female physically handicapped persons¹ forming about 2.43 per cent of the total population of the district. On the 51st birthday of the then Chief Minister of Tamil Nadu, Dr. M. Karunanidhi, various schemes were implemented for the rehabilitation of physically handicapped.

In Pudukkottai, 35 tricycles and 5 wheel chairs were given to the physically handicapped. 21 persons were given hearing aids. About seven physically handicapped persons were selected for secretarial course training. 36 persons were selected for being trained in khadi and village industries². One school for the blind was started in Pudukkottai where, at present, there are 25 children. There are three secondary grade teachers, one Deputy Warden, one Ayah, one Cook and one watchman in the school. Its total expenditure recurring and non-recurring is Rs. 19,000.³

There is also one school for the deaf in Pudukkottai⁴, with twenty inmates. Its total expenditure recurring as well as non-recurring involved is Rs. 32,000.

A palm-leaf training Centre was started in Pudukkottai on 8th June, 1975. There are at present seven physically handicapped persons in the institution.

Old Age Pension Scheme.—The Old Age Pension Scheme is yet another special service introduced by the Government of Tamil Nadu. It came into effect from the 1st April, 1962. Some forty-five thousand persons are benefiting from the scheme today. The scheme provides pensions to destitutes 65 years of age and over. A person is considered a destitute if he or she is without any source of income and has no relatives of 20 years and over such as a son, son's son, husband or wife. The Tamil Nadu Government under the Social Security Scheme have extended the old age pension to

¹ Report of Director of Social Welfare, dated 26th September 1975.

² Report of Director of Social Welfare, dated 25th August 1975.

³ Ibid.

⁴ Ibid.

destitute widows of age not less than 45 years from 1st June 1975. Applications for the pension are sent to the Tahsildar of the taluk in which the destitute resides. The Revenue Divisional Officer is the sanctioning authority. The amount of pension is sent to the pensioner through postal money order without deducting the money order commission¹. They are paid Rs. 20 per month. On the 1st of January 1975 there were about 978 persons receiving this pension in Pudukkottai district. Since the inception of the scheme in 1962 a sum of Rs 24,81,977 has been disbursed in the areas now comprising the five taluks of Pudukkottai district as follows:—

<i>Name of Taluk.</i>	<i>Total amount disbursed. (in rupees)</i>
1 Pudukkottai	47,353
2 Kulattur	4,37,877
3 Tirumayam	7,09,597
4 Alangudi .	7,07,515
5 Arantangi	5,79,634

A large proportion of the old age pensioners consists of widows and women with no support. Of Pudukkottai town, seventy year old Meenakhshi Ammal, for instance, was married to a bus driver, who died property-less at the young age of 40. Her only son died too at the age of nine. The lady now stays with people known to her, who are not relatives, paying them the pension she gets in return for food. Then there is the case of Baba Sahib, an old Muslim tailor, who has had to give up his profession on account of the loss of eye-sight. He has no children, his wife having passed away twenty years ago. He hands over the money received by him to an institution which gives him food in return. This is a familiar pattern and can be multiplied. Money received by the pensioners helps them to mitigate their sense of dependance on a society that has little or no feeling of concern for them.

¹ A Humanitarian Scheme—Pension for the Old—Madras Information, July 1962, pages 11-12.

While the Old Age Pension is granted to the people above the age of 65, those who are unable to earn a living due to blindness, leprosy, insanity, paralysis, or the loss of limbs are also granted a pension from the age of 60 years and above. The Government of Tamil Nadu has recently ordered¹ that this lower age-limit for the physically handicapped be brought down further to persons of 55 years and above provided they suffer from certain specified forms of permanent physical impairment. Ten thousand such additional physically handicapped persons are proposed to be thus benefited in the whole State, from among whom 250 are to be selected in Pudukkottai district.



வாய்மையே வெல்லும்

¹ G.O. Ms, No. 1492, Finance, dated 6th November 1974.

CHAPTER XVIII

PUBLIC LIFE AND VOLUNTARY SOCIAL SERVICE ORGANIZATIONS.

The greatest development in public life since Independence and, in Pudukkottai, since the former State's merger with the Indian Union, has been the exercise of universal franchise. Five general elections have taken place in the area, as in the rest of the State. Its political awareness has been articulated on these five occasions. Apart from choosing its representatives to the elected legislatures, the Pudukkottai area has organised voluntary associations of its own, which are active in the service of the district's people.

Public Life.—"Long years ago, we made a tryst with destiny, and now the time comes when we shall redeem our pledge not wholly or in full measure but substantially. At the stroke of the midnight hour, when the world sleeps, India will wake to life and freedom". These words of Jawaharlal Nehru, spoken to the Constituent Assembly of India, on the midnight of August 14, 1947, marked the transfer of power from Britain to the leaders of free India.

The British Parliament had, earlier that year enacted the Indian Independence Act, which terminated the authority of that body over India, transferring sovereignty to the new Dominions of India and Pakistan. Earlier still, the British Parliament had piloted the Government of India Act, 1935, "between the Scylla of British hesitation in the face of die-hard opposition, and the Charybdis of Indian ambitions and impatience as personified in Congress"¹ This Act contemplated a Federation of the British Indian Provinces and the Indian States, the Provinces joining the federal scheme compulsorily and the States being given the option to accede on the basis of their instrument of accession. The Government had just begun negotiations with the States when World War II broke out in 1939, interrupting the process. The thread could not, however, be picked up in quite the same manner after the war ended. Political

¹ R. A. Butler, in the first Jawaharlal Nehru Memorial Lecture, 1966, at the University of Cambridge.

developments had, by 1945, overtaken the federal provisions of the 1935 Act. The provincial part of the Act came to be operated in 1937 in the British Provinces. But since the Act did not contain any provision for the internal government of the States, they continued their (often archaic) forms of administration while 'British India' moved ahead with self-government. The transfer of power to Indian hands was now not only inescapable but imminent. It was obvious that while sovereignty was divisible (as it was between the British Government and individual rulers) independence was not. It was imperative that the new India should comprise not merely of its old "British" provinces but also of its numerous States which were not only geographically continuous but had ties with the rest of India that were historically, culturally and socially indissoluble. No 'option' to accede or not to accede could, realistically be given to or exercised by them.

In 1946, the Cabinet Mission sent out to India by Britain's Labour Government to settle the procedures required for the transfer of power issued a memorandum which made it clear that while Britain would not transfer its paramountcy over the States to an Indian Government, it would, at the same time, not be in a position to implement its erstwhile obligations of paramountcy. This meant that the rights surrendered by the States to the Paramount Power would, on Indian independence, flow back to the States. It also meant, however, that the only means of the States exercising those rights, namely, with the aid of British troops, would be lost simultaneously. The memorandum indicated that the States should turn their gaze to a future wherein they would take their due place in the new nation that was being born.

With the enactment of the Indian Independence Act of 1947, a political arrangement between the Government of India and the States became essential for the maintenance of continuity in administration. All the States, therefore, (with the exception of Hyderabad, Jammu and Kashmir, and Junagadh) agreed to cede to the Dominion Government all powers over foreign relations, defence, and communications and to execute over the remaining areas of administration, 'Standstill Agreements'.

As months passed, the need for an administrative integration of these States became pressing. Alan Campbell-Johnson, Press Attache to Lord Mountbatten, the last Viceroy and Governor-General of India, made the following entry¹ in his diary on the 25th of July 1947 : " To-day Mountbatten has his first and last meeting with the Princes. For never again will they be addressed in full session by a Viceroy and Crown Representative. This is no formal hail and farewell, but a political occasion of the first order. The Princes are divided and uncertain, baffled by the pace of events. Mountbatten for his part has no detailed directives from London to support him. The brief references to the States both in the 3rd June and Cabinet Mission Plans only serve to underline that the essential transfer of power is between Britain and British India. . . . Mountbatten was in full uniform, with an array of orders and decorations calculated to astonish even these practitioners in Princely pomp. Once again he spoke without any notes, and was never at a loss for word or phrase. . . . The core of his message this afternoon was contained in the cogent phrase " You cannot run away from the Dominion Government which is your neighbour any more than you can run away from the subjects for whose welfare you are responsible ". I cannot imagine, however, a more difficult assembly for any man to have to address than this one. Here was, in fact, an audience of hereditary shepherds in the unenviable position of lost sheep. Once again Mountbatten's morale-raising talent was seen to full advantage. For he somehow managed to infect them with his own spontaneous enthusiasm and powers of decision. In the process what began as an occasion of high seriousness soon developed into one of flippancy and banter, as Mountbatten began to deal with the mass of questions cogent and obtuse which were thrown at him. Thus a certain Maharaja, absent from his State and from India at this critical moment, did not seem to appreciate the importance either of coming himself to the meeting or even of briefing his Dewan. For the Dewan had been sent no instructions whatever. " Surely ", Mountbatten asked, " you must know your Ruler's mind, and can take a decision on his behalf ? " " I do not know my Ruler's mind " the hapless Dewan replied. , " and I cannot get a

¹ Mission with Mountbatten (1951,) by Alan Campbell-Johnson,

reply by cable . Mountbatten thereupon picked up a large round glass paper-weight which happened to be on the rostrum in front of him. "I will look into my crystal," he said, "and give you an answer". There followed ten seconds of dramatic pause when you could have heard a princely pin drop. "His Highness", Mountbatten solemnly announced, "asks you to sign the Instrument of Accession".

The "tryst with destiny", beginning to take visible shape after the 15th August 1947, the States' rulers affixed their signatures to co-ventures ceding to the central Government "exclusive authority, jurisdiction and powers for and in relation to the governors of the States".¹ The "patchwork quilt" of British Indian provinces and Indian States became transformed into a light and shade fabric of shot silk.

The merger of Pudukkottai State, which has been described in Chapter II, formed part of this national pattern in the climactic months of 1947-48.

The Constituent Assembly which had been first convened on December 9, 1946, concluded its work on November 26, 1949, making for the transformation of the Dominion of India into a sovereign democratic republic on January 26, 1950. The Constituent Assembly continued to function as an interim Parliament until 1952 when free India's first elections based on universal suffrage and adult franchise were held, and a new Parliament was formed. The elections were held in the territories of the former British provinces and States alike.

The new Constitution provided for bicameral legislatures both at the Centre and in the States, as the new units comprising the old provinces and Indian States came to be called. A Council of States or the Upper House (Rajya Sabha) was to be elected by the Legislative Assemblies of the States on the basis of their population. It was intended to function primarily as a revisory chamber composed of elder statesmen, administrators and constitutional experts. The provision of indirect election for members of the Rajya Sabha

¹ With the exception of the three States mentioned, the integration of whom followed later.

subverted this end. The Rajya Sabha has, accordingly, developed into an advisory body with no powers to block legislation passed by the principal legislative body, House of the People or the Lower House (Lok Sabha). Members of the Lok Sabha were to be elected on a one-adult one-vote basis by electoral constituencies formed by a suitable division of the territories of the states.

Members were to be henceforth elected by a combination of direct and indirect election to the Legislative Councils (Upper Houses) and directly to the Legislative Assemblies (Lower Houses) in the States.

With these provisions every citizen of India whether a resident of the former 'British' India or 'Indian India' became eligible for either House whether at the Centre or in the States, subject to the restrictions that he be thirty years of age to be a member of the Upper House and twenty-five to be a member of the Lower House, that he does not occupy any office of profit under Government and not be an undischarged bankrupt or of unsound mind.

General Elections—1952.

The Legislative Council.—In 1952, when the Legislative Council was formed for the first time in Madras, after the framing of the Constitution, 72 seats had to be filled in it. Out of these 72, 60 were filled by election and 12 by nomination. Out of the seats to be filled by election, 36 were by direct election, and 24 by indirect election. There were 5 two-member constituencies, 6 three member constituencies and 2 four-member constituencies.

Three members were elected from a constituency consisting of South Arcot, Tanjore, and Tiruchirappalli districts. The present Pudukkottai district formed part of this constituency.

According to Article 171 of the Constitution, the number of members in the Legislative Council should not exceed one-third of the total number of members in the Legislative Assembly. There are at present (1975) 63 members in the Council of whom 54 are elected and 9 nominated. One-third of the members retire on the

expiration of every second year. The present strength of elected members stands distributed among different types of constituencies as detailed below :—

Graduates' Constituencies	..	..	..	6
Teachers' constituencies	..	..	..	6
Local Authorities Constituencies	..	..	..	21
Elected by members of the Tamil Nadu Legislative Assembly.				21
Total				54

The Legislative Assembly.—In 1952, the then Madras State was divided into 309 Legislative Assembly constituencies. There were 375 seats to be filled by elections. 243 were single member constituencies, 62 were two-member constituencies in each of which a seat had been reserved for members from the Scheduled Castes, and 4 were two-member constituencies in each of which a seat had been reserved for members from the Scheduled Tribes.

The area of the present Pudukkottai District (subject to some minor differences) had been divided into three constituencies, namely 203—Arantangi, 217—Pudukkottai and 218—Tirumayam. Tirumayam constituency was a reserved one, and therefore elected two candidates, including one member from the Scheduled Caste. The total population in these three constituencies was 6,46,414 (3,19,986 men and 3,26,428 women).

The total number of voters in the Pudukkottai area in the General Elections of 1952 was 3,05,196 as against 2,69,80,956 in the rest of Madras State. The number of persons who participated in the voting was as follows :—

<i>Number and name of the Constituency.</i>				<i>Men.</i>	<i>Women.</i>	<i>Total.</i>
(1)				(2)	(3)	(4)
203—Arantangi	..	..	..	20,029	16,069	36,098
217—Pudukkottai	..	..	..	25,430	18,419	43,849
218—Tirumayam	..	..	..	45,232	35,696	80,928
Total				90,691	70,184	1,60,875

The following statistics may help comparison of the voting behaviour in these three constituencies with that in the rest of Madras State.

	<i>Percentage of the voters who participated in voting.</i>		
	<i>Men.</i>	<i>Women.</i>	<i>Total.</i>
State	65.39	52.12	58.75
203—Arantangi	63.69	48.27	55.84
217—Pudukkottai	64.71	43.73	53.87
218—Tirumayam	60.06	42.59	50.87

The particulars of the results of the General Elections in 1952 in the State are detailed below :

For 375 seats, 1,677 candidates contested. 1,302 candidates lost in the elections, of whom the deposits of 789 persons had to be forfeited. The total of 375 seats were won by different parties as detailed below :—

(i) Indian National Congress	152
(ii) Independents	62
(iii) Communists	62
(iv) Krishak Mazdoor Praja Party	35
(v) Tamil Nadu Toilers Party	19
(vi) Socialist Party	13
(vii) Krishikar Lok Party	15
(viii) Commonweal Party	6
(ix) The Madras Muslim League	5
(x) Marxists Party	3
(xi) Scheduled Castes Federation	2
(xii) Justice Party	1
	<hr/> 375 <hr/>

Of the elected candidates 225 were from non-backward classes, 84 were from the unscheduled backward classes, 62 were from the Scheduled Castes and 4 were from the Scheduled Tribes. There were only two women members elected ; both of whom belonged to the Indian National Congress.

In the three constituencies, in the Pudukkottai area, results were declared as follows¹:

	<i>Successful party.</i>	<i>Number of votes.</i>
203—Arantangi	Congress	19,064
217—Pudukkottai	Toilers Party	22,954
218—Tirumayam (Not Reserved).	Congress	37,692
(Reserved)	Toilers Party	31,562

Parliament.—In Madras State, there were 75 seats to be filled by election, distributed in 62 constituencies (49 single member constituencies, 12 two member constituencies in each of which a seat had been reserved for a member of the Scheduled Castes, and one two-member constituency in which a seat had been reserved for a member from the Scheduled Tribes).

<i>Total number of voters</i>	26,980,956
Women	13,581,262
Scheduled Castes	4,149,679
Scheduled Tribes	291,180

Results :

Congress	35
Independent	15
Communist	8
Krishak Mazdoor Praja Party ..	6
Tamil Nadu Toilers Party ..	4
Commonweal party	3
Socialists	2
Madras State Muslim League ..	1
Marxist Party	1

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¹General Elections in Madras State, 1951-52 (Election Data Analysis.)

In the Pudukkottai Parliamentary constituency the Praja Socialist Party won the election. Total number of voters in the constituency was 3,74,269 out of whom 192,690 participated in voting. The percentage of voting in this constituency was 1

		<i>Number of persons.</i>	<i>Percentage to the number of voters.</i>
Men	.. .. .	110,386	60.95
Women	.. .. .	82,304	42.60

The total voter participation was 51.48 per cent.

General Elections—1957.

The Legislative Assembly.—In 1957, there were 167 Legislative Assembly constituencies—129 single member constituencies and 38 two-member constituencies. Out of 38, 37 two-member constituencies were reserved for members from the Scheduled Castes and one for the Schedule Tribes. The total number of seats to be filled was 205.

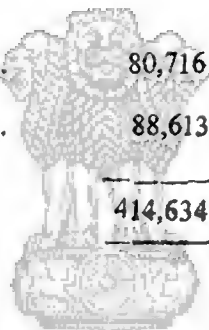
Tirumayam, Alangudi, Gandharvakkottai and Arantangi constituencies together covered the area of the present Pudukkottai district. Alangudi was a two-member constituency, one seat having been reserved for a member from the Scheduled Castes.

The strength of the total electorate in the State was 1,75,14,993. Of this, 1,11,30,996 voters (63.5 per cent) participated in the election. The results were declared as detailed below :

	<i>Number of seats secured.</i>	<i>Number of votes received.</i>	<i>Percentage.</i>
Indian National Congress.	151	50,46,576	45.34
Communist Party of India.	4	8,23,586	7.40
Praja Socialist Party ..	2	2,93,778	2.64
Other Parties and Independents.	48	49,67,060	44.62

In the constituencies of the Pudukkottai area, the outcome of elections was as detailed below :

<i>Number and name of constituency.</i>	<i>Total number of voters.</i>	<i>Votes polled.</i>	<i>Percentage of voter participation.</i>
(1)	(2)	(3)	(4)
82—Tirumayam ..	90,321	50,714	56.2
83—Alangudi (Non-reserved).	154,984	141,120	91.0
83—Alangudi (reserved for SC).	..	..	..
78—Gandharvakkottai ..	80,716	41,124	50.6
81—Aranthangi ..	88,613	40,807	46.0
	<u>414,634</u>	<u>273,419</u>	<u>65.9</u>



வாய்மையே வெல்லும்

<i>No. of the constituency.</i>	<i>Name of the successful party.</i>	<i>Votes secured.</i>	<i>Percentage of votes polled.</i>
(1)	(2)	(3)	(4)
82	Congress	28,178	55.84
83	Congress	28,599	20.27
83	Congress	22,405	15.88
78	Congress	18,928	46.03
81	Independent	17,637	43.22

Parliament.—As for the Lok Sabha, the total seats to be filled up in the State were 41. The percentage of voting was 62·5. The results of the elections in the State were :

	<i>Number of seats secured.</i>	<i>Number of votes received.</i>	<i>Percentage.</i>
(1)	(2)	(3)	(4)
Indian National Congress ..	31	50,94,552	46·52
Communist Party of India	2	11,01,338	10·06
Praja Socialist Party ..	..	3,99,789	3·65
Other Parties and Independents.	8	43,55,162	39·77
	<hr/> 41 <hr/>	<hr/> 1,09,50,841 <hr/>	

There was a separate Pudukkottai constituency for the Lok Sabha. There were 4,19,435 voters, of whom 2,22,751 voters (53 percent) participated. The candidate of the Congress Party won the election, securing 1,11,694 votes, i.e., 50·13 percentage of the votes polled.

General Elections—1962.

The Legislative Assembly.—The details of the elections for the Tamil Nadu Legislative Assembly in 1962 are furnished below :

Strength of electorate in the Madras State ..	1,82,14,670
Total votes polled	1,31,91,724
(Percentage 72·4).	
Number of seats	206
Won by Indian National Congress ..	139
Won by Dravida Munnetra Kazhagam ..	50
Won by Swatantra	6

Won by Forward Block	..	..	..	3
Won by Communist	..	..	..	2
Won by Socialist	..	..	..	1
Won by Independents	..	..	..	5

There were thirteen women members elected, out of whom 11 belonged to the Congress and one each belonged to D.M.K and Swatantra parties.

Tirumayam, Alangudi (reserved for SC), Pudukkottai, Gandharvakkottai and Arantangi constituencies covered the areas comprised in the present Pudukkottai District. The following particulars relate to the voting behaviour and results in the Pudukkottai area in these elections.

<i>Number and name of the constituency.</i>	<i>Strength of the electorate.</i>	<i>Number of votes polled.</i>	<i>Percentage of voter participation.</i>
135-Tirumayam	95,388	64,753	67.8
136- Alangudi (reserved for SC).	81,983	51,546	62.8
137-Pudukkottai	90,179	57,815	64.1
166-Gandharvakkottai ..	89,012	59,247	66.5
169-Arantangi	87,806	61,143	69.6
	<u>444,568</u>	<u>294,504</u>	<u>62.2</u>

<i>Number of the constituency.</i>	<i>Successful party,</i>	<i>Number of votes received.</i>	<i>Percentage of votes secured.</i>
135	Congress	28,219	43.5
136	Dravida Munnetra Kazhagam.	31,438	60.9
137	"	37,563	65.1
166	Congress	24,878	42.1
169	Dravida Munnetra Kazhagam.	33,781	55.3

Parliament:—As regards the Lok Sabha the total votes polled in the State were 1,23,43,934 (70·52 of the electorate). There were 41 seats to be filled up, which were won by different parties as detailed below:—

<i>Name of the party.</i>	<i>Number of seats.</i>	<i>Valued votes polled.</i>	<i>Percentage of votes secured.</i>
Indian National Congress.	31	56,23,013	45·3
Dravida Munnetra Kazhagam.	7	23,15,610	18·6
Swatantra .. ..	..	13,00,526	10·5
Communist	2	12,72,302	10·2
Praja Socialist Party .. ..	..	2,09,101	1·7
Forward Block	1	1,75,772	1·4
Socialist .. ..	..	45,097	0·4
Others and Independents .. ..	..	14,82,614	11·9
	41	1,24,24,035	

The Padukkottai constituency had 4,46,368 voters of whom 3,09,446 voters (69·33 per cent) participated in voting. The candidate of the Communist party won the election securing 1,34,162 votes (45 per cent).

General Election—1967

The Legislative Assembly.—On the basis of the Census of India, 1961 the total number of Assembly constituencies in Madras State for the 1967 General Elections was raised to 234 by the Delimitation Commission. Of this, 42 seats were reserved for the Scheduled Castes and two for the Scheduled Tribes. The Parliament seats were, however, reduced to 39 of which seven were reserved for Scheduled Castes. In the 1962 General Elections five Assembly Constituencies had constituted one Parliamentary constituency. In the 1967 General Elections six Assembly constituencies constituted one Parliamentary constituency.

The total strength of the electorate in the Madras State was 2,07,97,325. Of this, 1,59,28,693 voters (76.59 percent) participated in voting. The particulars of seats won by different parties in the State are as follows :

Dravida Munnetra Kazhagam	..	..	..	138
Indian National Congress	..	..	..	50
Communist Party of India (Rightist)	..	..		2
Praja Socialist Party	..	..	..	4
Samyukta Socialist Party	..	..	..	2
Swatantra	..	..	..	20
Other Parties and Independents	..	..	..	7
Communist Party of India (Marxist)	..	..		11
				<hr/> 234 <hr/>

Viralimalai, Tirumayam, Alangudi, Pudukkottai, Gandharvakottai and Arantangi constituencies were there in Pudukkottai area. The voting-behaviour and results of 1967 General Elections in these constituencies are described below :

<i>Number and Name of the constituency.</i>	<i>Number of voters.</i>	<i>Number of votes polled.</i>	<i>Percentage of voter-participation.</i>
(1)	(2)	(3)	(4)
165 Viralimalai	90,479	64,363	71.14
166 Tirumayam	89,371	74,376	83.22
167 Alangudi	80,163	67,816	84.58
168 Pudukkottai ..	91,205	75,746	83.05
188 Gandharvakottai ..	82,264	67,871	82.5
191 Arantangi	99,142	83,336	84.06

<i>Number of the constituency.</i>	<i>Successful party.</i>	<i>Number of votes received (of valid votes).</i>	<i>Percentage of votes secured.</i>
(1)	(2)	(3)	(4)
165	Dravida Munnetra Kazhagam.	30,288	49.63
166	Do.	44,511	62.78
167	Do.	32,984	50.65
168	Congress	45,342	62.07
188	Do.	34,665	52.68
191	Dravida Munnetra Kazhagam.	42,943	53.11

Parliament.—For the Lok Sabha, out of the total strength of 2,07,96,846 voters, 1,59,28,296 voters (76.59 per cent). participated in the election. The total of 39 seats was shared among the different parties as follows :

Dravida Munnetra Kazhagam ..	25
Indian National Congress ..	3
Swatantra	6
Communist Party of India (Marxist).	4
Others and Independents ..	1
	<hr/> 39 <hr/>

The Pudukkottai Parliamentary constituency had a total strength of 5,37,515 voters, of whom 4,27,900 voters (82.98 per cent) participated in voting. The Marxist Party candidate won the election, securing 1,99,469 votes (46.6 per cent).

Arantangi and Gandharvakkottai Assembly constituencies formed part of Thanjavur Parliamentary constituency, which had 5,21,429 voters. 4,40,409 voters (84.5 per cent). exercised their franchise. The candidate of Dravida Munnetra Kazhagam, won in the election, securing 2,25,414 votes (52.6 per cent).¹

¹ Reports on Election (Data Analyses) published by Government.

1971 ELECTIONS

The Legislative Assembly.—The last elections for both the Parliament and State Legislative Assembly, were held in Tamil Nadu (Madras State) in February—March of 1971, i.e., one year earlier than when normally due. The following particulars relate to these elections for the Legislative Assembly in Tamil Nadu.

The total population of Tamil Nadu (1971 Census) 41,199,158

Total electorate (as on 3rd February 1971)—

Men	..	..	..	..	..	1,15,22,540
Women	..	..	..	..	..	1,15,42,445
Total	..	..	..	..	..	2,30,64,985

Total Number of votes polled—

Men	..	..	..	..	..	85,65,340 (74.34 per cent)
Women	..	..	..	..	..	80,04,420 (69.35 per cent)
Total	..	..	..	..	..	1,65,69,760 (71.84 per cent)

Total Number of Assembly Constituencies ..	234
Number of constituencies reserved for SC ..	42
Number of constituencies reserved for ST ..	2
Total number of candidates	748

Seats secured by Dravida Munnetra Kazhagam.	184
Seats secured by Indian National Congress (O)	15
Seats secured by Independents	10
Seats secured by Communist Party of India	8
Seats secured by Forward Block	7
Seats secured by Swatantra Party	6
Seats secured by Praja Socialist Party ..	4
	— — —
	234
	— — —

The area of the present Pudukkottai district was covered by six Assembly constituencies. The particulars of voting behaviour and results in these constituencies are furnished below :

<i>Number and name of the constituency.</i>	<i>Electorate.</i>			<i>Number and percentage of votes polled.</i>		
	<i>Men.</i>	<i>Women.</i>	<i>Total.</i>	<i>Men.</i>	<i>Women.</i>	<i>Total.</i>
165 Viralimalai.	48,605	51,625	1,00,230	39,091 (80.43)	36,220 (70.16)	75,311 (75.14)
166 Tirumayam.	45,763	53,980	99,743	35,576 (77.74)	40,929 (75.82)	76,505 (76.70)
167 Alangudi ..	44,848	50,232	95,080	41,390 (92.29)	41,254 (82.13)	82,644 (86.92)
168 Pudukkottai.	51,045	52,610	1,03,655	40,194 (78.74)	38,618 (73.40)	78,812 (76.03)
188 Gandharvak-kottai.	45,907	47,445	93,352	38,677 (84.25)	36,698 (77.35)	75,375 (80.74)
191 Arantangi ..	54,336	57,425	1,11,761	45,545 (83.62)	45,150 (78.62)	90,695 (81.15)

Of these six constituencies, five were won by the Dravida Munnetra Kazhagam and one by Indian National Congress (O). The votes secured by the different parties in these constituencies were as follows :—

The percentage of votes secured by each party are shown in parentheses.

<i>Name of the Party.</i>	<i>Votes secured in constituencies and their numbers.</i>					
	165	166	167	168	188	191
Dravida Munnetra Kazhagam	41,813 (57.47)	38,630 (53.20)	43,279 (64.22)	..	42,025 (57.59)	49,322 (55.81)
Indian National Congress (O).	30,274 (41.61)	24,353 (33.54)	35,397 (44.34)	34,680 (46.81)	28,239 (38.70)	37,289 (42.19)
Communist Party of India.	..	5,470 (7.53)	..	33,393 (45.07)	..	..
Independents ..	670 (0.92)	4,162 (5.73)	1,150 (1.44)	6,022 (8.12)	2,705 (3.71)	1,766 (2.00)
Total valid votes.	72,757	72,615	79,826	74,095	72,969	88,377

Parliament: —There were 39 Parliamentary seats to be filled up in the elections of 1971, for which 111 candidates sponsored by various political parties contested. The Dravida Munnetra Kazhagam secured 23 seats. The Indian National Congress came out second securing nine seats. The Communist Party of India got four seats. Forward Block, Indian National Congress (O), and Independents secured one seat each.

The Pudukkottai Parliamentary constituency, which had 6,04,445 voters in it, (of whom 4,55,327 voters participated in the elections) returned the candidate of Dravida Munnetra Kazhagam. He secured 2,51,861 votes (56.75 per cent) and the candidate of Indian National Congress (O) secured 2,03,466 votes (43.25 per cent).¹

The following statement shows the number of legislators returned from constituencies comprised in the area now forming Pudukkottai District.

<i>Election year.</i>	<i>Legislative Assembly constituencies.</i>	<i>Members returned.</i>	<i>Parliament constituencies.</i>	<i>Members returned.</i>
1952	Arantangi, Pudukkottai Tirumayam (SC).	4	Pudukkottai Thanjavur.	2
1957	Tirumayam, Alangudi (SC), Gandharvakkottai, Arantangi.	5	Pudukkottai, Thanjavur.	2
1962	Tirumayam, Alangudi (SC), Pudukkottai, Gandharvakkottai, Arantangi.	5	Pudukkottai Thanjavur.	2
1967	Viralimalai, Tirumayam, Alangudi, Pudukkottai, Gandharvakkottai, Arantangi.	6	„ ..	2
1971	„ ..	6	„ ..	2
		<hr/> 26		<hr/> 10

Present Delimitation.—In pursuance of the Delimitation Act, 1972 (76 of 1972), the Delimitation Commission has finalised the delimitation of the State Assembly and Parliamentary constituencies. Now, there are 239 State Assembly constituencies which are divided into 39 Parliamentary constituencies.

¹ Report on the Fifth General Elections in the Tamil Nadu, 1971—Vols II and III (1974).

The details of delimitation of State Assembly constituencies in Pudukkottai district are furnished below :—

*Serial number and
name of constituency.*

Extent.

- 189 Tirumayam Tirumayam taluk (excluding R. Palakurichi Panchayat in Ponnamaravathy Panchayat Union and Madagam, Kurungalur, Embal, Tiruvakudi and Irumbanadu panchayats in Arimalam Panchayat Union) in Pudukkottai district ; and village 166. Kappakudi in Unaiyur Panchayat in Marungapuri Panchayat Union in Manaparai taluk in Tiruchirappalli district.
- 190 Kulattur (SC) Kulattur taluk (excluding the panchayats in Keeranur Panchayat Union specified in item (51) of the Appendix and Komangalam Panchayat in Viralimalai Panchayat Union) in Pudukkottai district ; and village 100. Kottapattu in Alandur Panchayat in Manikandam Panchayat union and villages 167. Kavinaripatti and 168. Puthakudi in Unaiyur Panchayat in Marungapuri Panchayat Union in Manaparai taluk in Tiruchirappalli district.
- 191 Pudukkottai Pudukkottai taluk and the Panchayats in Keeranur Panchayat Union Specified in item 51' of the Appendix in Kulattur taluk.

Item 51 (Panchayats in Keeranur Panchayat Union in Kulattur taluk included in 191 Pudukkottai Constituency) (1) Themnavur (2) Koppampatti (3) Minnathur (4) Pappudayanpatti (5) Vathanakottai (6) Sanayakudi (7) Veerakudi (8) Kilanur (9) Perambur (10) Andakulam (11) Periathambl-Udayanpatti (12) Thennangudi (13) Valthur (14) Moothanpatti (15) Vathanakurichi.

*Serial number and
Name of constituency.*

Extent.

192 Alangudi

Alangudi taluk (excluding Kulanthiranpattu, Rangianviduthi, Kattathi and Kaliaranviduthi Panchayats in Karambakudi Panchayat Union) and the panchayats in Arantangi Panchayat Union specified in item 52¹ of the Appendix in Arantangi taluk.

193 Arantangi

Arantangi taluk [excluding the panchayats in Arantangi Panchayat Union specified in item (52) of the Appendix] and Madagam, Kurungalum, Embal, Tiruvakudi and Irumbanadu panchayats in Arimalam Panchayat Union in Tirumayam taluk.

The Kulattur, Pudukkottai, Alangudi and Arantangi Assembly constituencies form part of Pudukkottai Parliamentary constituency. The Tirumayam Assembly constituency forms part of the Sivaganga Parliamentary constituency. The Kulattur Assembly constituency has been reserved for members from the scheduled castes ²

The area comprised in the Pudukkottai district has, therefore, seen five general elections since the fateful days in 1947-48 when the erstwhile State's future as that of all the Indian States, was being debated. The will of the people of the area regarding their governance has been articulated six times revealing a growth in their political awareness.

By a proclamation issued on 31st January 1976, President's Rule was introduced in Tamil Nadu for the first time in its history. The presidential proclamation said : " I have received a report from the Governor of the State of Tamil Nadu and after considering the report and other information received by me, I am satisfied that a

1. Item 52 (Panchayats in Arantangi Panchayat Union in Arantangi taluk included in 192 Alangudi constituency). (1) Kurumbur (2) Sunayakadu (3) Peravakkottai (4) Maramadakki (5) Thirunelur (6) Chittankadu (7) Thantkani (8) Avanthankottai (9) Tholuvankadu (10) Siattur (11) Narpavalakudi (12) Aliyanila (13) Mookudi.

2. Notification by the Delimitation Commission, India published in the Tamil Nadu Government Gazette — Extraordinary 1-1-1975, part V — Section 4.

situation has arisen in which the Government of that State cannot be carried on in accordance with the provisions of the constitution of India." By the same proclamation, the State Legislature was also dissolved and the State came to be administered by the President through the Governor, assisted by Advisers belonging to the Indian Administrative Service.

1977 Elections.

Elections to the Lok Sabha were held all over the country in March, 1977. Elections to thirty nine (39) seats of Parliament were held on 16th and 19th March, 1977, in Tamil Nadu. One hundred and ninety five (195) candidates sponsored by various political parties contested. The All India Anna Dravida Munnetra Kazhagam secured 18 seats; Congress won 14 seats. The Communist Party of India (Rightist) and Janata Party claimed 3 seats each. The remaining one seat went to Dravida Munnetra Kazhagam.

The following statement shows the details of election in Pudukkottai and Sivaganga Parliamentary constituencies:—

	<i>Pudukkottai Constituency.</i>	<i>Sivaganga Constituency.</i>	<i>In Tamil Nadu.</i>
1 Number of voters ..	7,00,248	7,10,297	2,71,85,924
2 Number of votes polled.	5,32,811	4,85,942	1,82,52,235
3 Percentage of Participation.	76	68	67
4 Name of the Party which won.	AIADMK	AIADMK	..
5 Votes secured by the winning candidate.	3,42,120	3,38,999	..

The National Emergency which had been declared on June 26 1975 was in the meantime, revoked on March, 1977.

Elections for the 234 seats of Tamil Nadu State Assembly were conducted in June, 1977. The party position in the State Assembly is as follows:—

1 All India Anna Dravida Munnetra Kazhagam	..	130
2 Dravida Munnetra Kazhagam	.. ..	48
3 Indian National Congress	.. ..	27
4 Communist Party of India (M)	.. ..	12
5 Janata	.. ..	10
6 Communist Party of India	.. ..	5
7 Forward Bloc	.. ..	1
8 Independent	.. ..	1
Total	..	<u>234</u>

The details of election in the five Assembly Constituencies of the district are furnished below :—

		<i>Tirumayam.</i>	<i>Kulattur.</i>	<i>Pudukkottai.</i>
1 Electorate .. ..	.. ..	1,18,468	1,20,684	1,25,055
2 Votes polled .. ..	.. ..	81,030	74,965	86,061
3 Percentage .. ..	.. ..	68	62	69
4 Party which won	Indian National Congress.	Indian National Congress.	Indian National Congress.

5 Votes secured by the winning candidate.	20,694	27,071	36,406
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		<i>Alangudi.</i>	<i>Arantangi.</i>
1 Electorate	1,23,846	1,25,574
2 Votes polled	97,613	95,833
3 Percentage ... ..	... ..	79	76
4 Party which won ... ..	... ..	I.N.C.	A.I.A.D.M.K.
5 Votes secured by the winning candidate.	... ..	37,634	35,468

Voluntary Social Service Organisation.

While the people now elect their representatives to the State and Central legislatures their public role cannot stop with this alone. Their welfare and advance has to be wrought by both the State and by their own voluntary endeavours.

The frequency and ease with which the people of a local area are capable of joining hands for a common purpose indicate that areas public consciousness. Such enterprises, if they aim to bring about co-operation and understanding among the people can be instrumental for the many-sided development of the country. The voluntary organizations functioning at Pudukkottai are described below:¹

Rotary Club.—Founded on 23rd February, 1905, the Rotary Organization has grown as an international service organization. It is presided over by an elected president and has its secretariat in the U.S.A. The Rotary International is comprised of several districts, each of which is presided over by an elected Governor. The object of Rotary is to encourage and foster the ideal of service as a basis of worthy enterprise. The Pudukkottai Rotary club was 'Chartered' in 1953, with 30 members. This in the Rotary District 321 which covers all the clubs in Sri Lanka, and in India, about half of Kerala, and the Southern districts of Tamil Nadu.

For more than two decades, the Pudukkottai Rotary Club has been serving the community under the four avenues of service known to Rotary, namely Club Service, Vocational Service, Community Service and International Service.

The Pudukkottai Rotary Club has constructed number of bus-shelters in the Pudukkottai town and donated the same to the use of the general public. It has been awarding scholarships for poor students and presenting awards and certificates every year for an agriculturist, a nurse, a railway employee, an employee of the Electricity Board, a municipal servant, the maximum blood-donor for teachers and for a sanitarily well-maintained hotel in the city. At the cost of Rs. 10,000/- the club has constructed a school-building

¹ A note from K. Shanmugam, Advocate, Pudukkottai.

at Tirumalrayansamudram, a hamlet in the outskirts of the city, and donated the same to the villagers. Every year, the club is providing triple-antigen and polio-vaccines for poor children through municipal dispensaries. With the aid of the foreign rotary clubs, valuable agricultural implements have been imported by this club and have been given to poor agriculturists free of cost. Every year on Dipavali day, this club distributes sweets and savouries among the inmates of the local Borstal School and the Boys' club of Pudukkottai.

In the near future this club has proposed to construct a community hall for its personal use and for the use of the other service organizations and for the use of the general public.

The present strength of this club is 57. In addition to this, the District Collector, the District Judge, the District Superintendent of Police and the Chief Judicial Magistrate are its honorary members.

Pudukkottai 'Jaycees'.—This is another International service organization started in Pudukkottai in March 1970, with 15 members. Men between 18 and 40 are eligible to become members of this organization. Individual development or self-development is the motto of this organization. At times it concentrates on community service also. From its inception, the club has been active and has won number of National Awards at the time of the national conventions of Indian Jaycees. This club has contributed much in the field of road-safety, family-planning and child welfare. The present strength of this club has crossed 40 and a number of officials in the city are its honorary members. It has a Jayceerettes wing for the 'better-halves' of the Jaycees. They concentrate in child welfare, general health, distribution of old clothes and household problems.

Council for Child Welfare.—The Pudukkottai branch of the Child Welfare Council was formed in September, 1974. This is affiliated with the Tamil Nadu branch of the Indian Council for Child Welfare. Its ex-officio President is the District Collector. Both officials and non-officials are its members. The

activities of the District Branch cover the celebration of the Children's Day on November 14 every year ; the selection of children of outstanding courage for consideration in the selection of national awards for acts of bravery ; the starting of pre-primary schools in the slums and villages ; work with the Government and other voluntary organizations and welfare agencies to promote child welfare services ; to conduct children's film festivals, debates, exhibitions, competitions ; conduct babies-shows ; to provide facilities for recreation of children by opening holiday-homes for children ; to provide rehabilitation of juvenile delinquents ; and to make provisions of the mid-day meals for the school-going children.

Rifle Club.—The Rifle Club of Pudukkottai was organized in February, 1975. The objects of this organization shall be the encouragement of organized rifle and pistol shooting with a view towards a better knowledge on the part of citizens in the handling and proper care of firearms, as well as improved marksmanship. Any citizen of the Indian Republic, 18 years of age or over, can become a member of this organization on the unanimous vote of the Executive Committee of this organization. The District Collector is the President of this club. The District Superintendent of Police is the Vice-President and the Armed-Reserve Inspector is the Treasurer and a non-official is its honorary Secretary. The Executive Committee consists of the above and some other officials and non-officials. This organization has its range for shooting within the 'Residency' at present.

Now 15 persons including officials and non-officials in Pudukkottai district are its members. The wives and children can also become associate-junior members of this club. This club arranges shooting practice once in a fortnight.

Lions and Officers' Club.—The Lions Club is yet another international organization which has been active at Pudukkottai. It ran a hospital at Pulvayal and the Doctor-members of this club periodically visited and gave free medical aid to the villagers. The Lions of Pudukkottai have done yeomen service in the field of community service. At present (1975), this club is dormant and

steps are afoot to revive the same at the instance of the District Collector, and serve the community as before. The premises of the Officers' Club was the meeting place of the Lions Club.

As far as the Officers' Club of Pudukkottai is concerned, it is more a recreation club than a voluntary service organization. The District Collector is its *ex-officio* President. Officials and non-officials constitute its members in the ratio of 2:1. The club maintains a good library for its members. Members have opportunity to play all indoor as well as out-door games. This club is situated in the heart of the town. This club has been functioning very well for the past many decades.

District Soldiers', Sailors' and Airmen's Board.—Each district has such a Board, for the welfare of the ex-servicemen, with the Collector as its President. A Gazetted Full Time Secretary is placed in charge of the activities of the Board. As Pudukkottai is a newly formed district, a Board has not yet been constituted for it. The Board at Tiruchirappalli will take care of the needs of the ex-servicemen in this district also, till a separate Board for the Pudukkottai district is formed. The detail of statistics of ex-servicemen families and of the serving/deceased soldiers in Pudukkottai Revenue Division are as follows:

(i) No. of ex-servicemen in the former Pudukkottai division.	} 8,600
(ii) Families of serving soldiers	.. 3,000
(iii) Families of deceased soldiers	.. 675
	<hr/> 12,275 <hr/>

Ex-servicemen are provided with employment, loans for running business and assignment of lands for cultivation. Those who want to get loans apply to the Secretary, Tamil Nadu Shares of the Post-war Services Reconstruction Fund, and the Special Fund for Reconstruction of Rehabilitation of Ex-servicemen, through the concerned District Secretary of the Board. The Secretary of the concerned District Soldiers' Sailors' and Airmen's Board sends application to the Collector concerned for enquiry.

Based on the correctness of the information and particulars furnished by the applicant in his application and on the recommendations of the Collector, a loan is granted from the Tamil Nadu Shares of the Post-war services. Reconstruction Fund and the Special Fund for Reconstruction and Rehabilitation of Ex-servicemen for setting up business. Eligible persons are given employment based on their educational qualifications.

After the formation of this district in January, 1974, the Pudukkottai District Red Cross Association, the Pudukkottai branch of Seva Samajam, the Pudukkottai branch of Tuberculosis Association and the Pudukkottai District Teachers' Welfare Association have been formed with officials and non-officials. Members of Parliament, Members of the Tamil Nadu Legislative Assembly, and Chairmen and Commissioners of the Panchayat Unions are members of the above organizations. The above organizations are functioning well and concentrate their activities in the respective spheres for the purpose for which they are formed.

YOUTH SERVICE CORPS.

The Tamil Nadu Government have the distinction of having started a Youth Service corps scheme for educated unemployed persons who would dedicate themselves to Social Service in the rural areas. This is the first of its kind in India.

The Youth Service Corps volunteers should have a degree or a diploma. The upper age limit for recruitment is 30 years as on 1st July of the year in which they are recruited and the initial recruitment is for a period of two years. They are given training for 2 months in the Youth Service Corps Training Centre, Bhavani-sagar, including the village placement for the stipulated period of three weeks.

The Youth Service Corps voluntary scheme is in operation in the Pudukkottai district with 35 men volunteers and 10 women volunteers. Each volunteer is paid Rs. 175 per mensem as honorarium. The dual objective of the scheme is to mitigate the problems of educated unemployed and also to bring about a perceptible change in the living conditions of the rural people covering their economic,

social, educational and health conditions by way of putting trench latrines, conducting adult literacy classes, family planning extension, maintenance of kitchen garden, social work in hospitals, etc. These volunteers conduct lectures on untouchability, adult literacy classes, forming of youth clubs. They conduct in-door and out-door games such as carrom, chess, foot-ball, volley-ball, basket-ball and rural games. They also conduct sports in the villages. They help agriculturists in 'grow more food' campaign, pests control, etc. They do propaganda for family planning, small savings, improved methods of agricultural farming and distribution of improved varieties of seeds to them. They also educate agriculturists in the economic use of Chemical fertilizers.

In general, Youth Service Corps volunteers serve as multi-purpose media to propagate among the villagers, the various development activities undertaken by Government.

For the period from December, 1974 to July 1975 in Pudukkottai district Youth Service Corps Volunteers had conducted 954 adult literacy classes in which 2,428 villagers participated. 272 Youth clubs were formed in which 3,299 villagers participated.



सत्यमेव जयते

CHAPTER XIX—PLACES OF INTEREST

Having witnessed the interplay of all the chief dynasties of the south—Pallava, Pandya, Chola, Irukkuvel, Muttaraja, Hoysala, Muslim, Vijayanagar, Nayak, Maratha and the European, the Pudukkottai area shows, with museological diversity and profusion, antiquities of every description : epigraphs, monuments, sculptures, paintings.

Introduction.—If the topography of the Tamil Nadu is visualised as a painting, the Pudukkottai terrain can be regarded as the palette on which colours were mixed for the canvas.

One sees representative specimens in the Pudukkottai district of all the five geographical tracts that have, in ancient literature, made up the Tamil land—*Kurinji*, *Mullai*, *Marudam*, *Neidal* and *Palai*. A microcosmic view of the five-fold spectrum is afforded by the district. The *Kurinji* class of land is seen in its hillocks such as the temple-topped Viralimalai, where Murugan “the ever charming Dravidian deity was wont to reside¹”, Kudimiyamalai, Narttamalai, and the seat of the fabled Sangam king Pari—Piranmalai. Here also, is the *Mullai* or forest terrain with sub-montane scrub jungles such as at Sengirai ; the *Marudam* or settled plains as in the Alangudi and Pudukkottai taluks ; the *Neidal* or coastal sandbelts as at the land’s edges in Arantangi ; and the dry wastes or *Palai* lands which come up like an eroding rash all over the district when rains fail.

The tract holds maximum interest, however, for the historian, anthropologist and archaeologist. The numerous dolmens, stone-circles and other forms of megalithic burial² in the district link us, time machine-like, with pre-historical and proto-historical times.

¹ The words are K,V, Soundara Rajan’s, from a note written by him for this section of the Pudukkottai District, *Gazetteer*

² See Chapter II,

Some of these have been excavated and their precious contents are kept and displayed at the Government Museum in Pudukkottai town. The majority of them, however, await the spade of the archaeologist and the study of the anthropologist.

If the inhabitants of this region in the millennium before Christ were adepts at lifting rock slabs by the firing method (as did their compeers in Madagascar in the west and Indonesia in the east), and designing tomb structures, their successors were to use the area's geological inheritance for the excavation of sophisticated rock-cuts and, with better skills in quarrying, dressing and sculpting free-standing temples and impressive secular monuments. Of rock-cut caves, Pudukkottai district has, by itself, not less than fifteen—at Sittannavasal, Tirugokarnam, Tirumayam, Kudimiyamalai Malayadipatti, Narttamalai, Malayakkovil and Kunnandarkovil. All these have been noticed in the *Manual of the Pudukkottai State* (General Volume, 1938; History, 1942; and Gazetteer Volume, 1944) edited by K. R. Venkatarama Ayyar, while the Malayakkovil rock-cut resembles those at Tirumayam and Malayadipatti, the one at Kunnandarkovil (assigned to the eighth century) is notable for its hundred pillared mandapam in the Vijayanagar style which is designed to represent a four-wheeled chariot drawn by a pair of horses.

It would be useful to note that the Deccan Cave temples (Buddhist as well as Hindu) are all carved in softer rocks like Deccan trap or sandstone, while those of Tamil Nadu are carved, for the first time, in hard granite. The cave temples of Andhra Desh, around Vijayawada (about 10 in number) and Udayagiri (a compact group) are in Khondalite gneiss and schistose rock respectively, for comparison.

Structural temples punctuate the entire district in what Soundara Rajan has called¹ "a classic show of religio-cultural awakening in the historic periods." The district's more important monuments of this class are the archaeological remains at Kodumbalur of structures raised by the Irukkuvel chieftain Bhuti Vikramakesari (c676-705 A.D.) and others; the Vijayalaya Cholisvaram at Narttamalai.

¹In a note for the Pudukkottai District Gazetteer.

which has been described¹ as “the one structure which comprises in it the different distinguishing features of all phases of south Indian art”; the temple at Kudimiyamalai, with its celebrated epigraphic ‘treatise’ on music; the large votive temple attributed to Manikka-vasagar at Avadayarkovil.

Temples of less renown but, nevertheless, of considerable merit are the exquisitely carved structures at Madattukovil, Tiruvilangudi and Kunnandarkovil (all in Kulattur taluk). There are similar, less renowned but interesting, temples at Kumaramalai (Kulattur taluk), Adanur, Enadi, Chittur, Kannanur, Kilattanaiyam, Tiruk-malambur (all in Tirumayam taluk).

These edifices rose in the eras dominated by the Pallava, Chola and Pandya dynasties which were supported in the buffer areas of Pudukkottai, by feudatories such as the Irukkuvels and the Muttaraiyars. The unmistakable impress of Vijayanagar traditions are also to be seen in some of the ornate carvings in the temples of the district.

Apart from the architecture and culture of these temples, the inscriptions on their walls are of great interest. Over the thousand inscriptions ranging from the second or third century Brahmi epigraph at the Eladippattam in Sittannavasal to those incised at the time of the Pallava, Chola, Pandya and Vijayanagar dynasties are to be seen all over the district. L.D. Swamikannu Pillai, who made a special study of the Pandya inscriptions, has stated² that “to give an idea of the value of Pudukkottai inscriptions, it will be sufficient to state that while in the Madras Presidency about 120 dated inscriptions have been discovered up to date for the Pandyas of the thirteenth century, in Pudukkottai alone there are 80 additional inscriptions of the same class and period.”

Thus in all respects—antiquities, monuments, epigraphs, sculptures painting, etc., the area is an epitome of South Indian history, having witnessed the interplay of all the chief dynasties of the south—Pallava, Pandya, Chola, Irukkuvel, Muttaraiyar, Hoysala, Muslim, Vijayanagar, Nayak, Maratha and the European.

¹ M, Arokiaswami in *The Early History of Vellar Basin* 1954.

² *A General History of the Pudukkottai State* 1916,

The district's archaeological material is eclectic. Apart from the predominant Hindu structures, there are jaina caves and caverns at Sittannavasal, Ammachatram, Narttamalai, Aluruttimalai, and Tenimalai as well as ruined jaina monuments and sculptures at Chettippatti, [Sembattur and Puttambur. Early jainism can particularly claim that during its earliest immigration in South, in the B.C's., and A.D's., it found the hills of Pudukkottai, a calm haven and this resulted in several dozens of natural caverns and beds in the district, often with some of the earliest vestiges of Tamil-Brahmi records at Sittannavasal. Mosques and dargahs can be seen at Pudukkottai, Pallivasal, Alangudi, Annavasal, Arantangi, Andakkulam, Narttamalai, Piranmalai, Kiranur, Tirumayam to mention some places. Avur, which was one of the foremost centres of Christian activity in South India has a fine church building. Other chapels in the district such as Pudukkottai town, Tirumayam, Alangudi and Tiruppunnavasal are worthy of mention.

For the political geographer and historian, the fortifications at Tirumayam, Kilanilai and Arantangi are of interest. Those interested in architecture, and the architectural styles of specific regions and periods in India, would like to study the very distinctive residential buildings of Nattukkottai Chettians in the 'nagarattar' villages of Tirumayam taluk such as Ramachandrapuram, Rayavaram and Arimalam. They would also like to see the public buildings in red-brick and stone of Pudukkottai town which are reminiscent of the hey-day of British and feudal rule.

Most sites of interest in the district are easily approachable by road, the erstwhile Darbar having laid a system of roadworks that spread out centrifugally in a radial pattern from Pudukkottai town.

Some of the more significant places of interest in the district are described in the pages that follow in an alphabetical arrangement. Figures of their populations are according to the Census of India, 1971 ; their distances from the district headquarters are given at the head of each narration.

ADANAKKOTTAI

Taluk—Alangudi.

Population—2,750.

Distance from Pudukkottai—24 kms.

Adanakkottai is a village on the Pudukkottai-Thanjavur road, fifteen miles from Pudukkottai. Those journeying between Pudukkottai and Thanjavur down the years have found in Adanakkottai a convenient resting place en route.

One set of people taking this road, however, derived no comfort at Adanakkottai. In 1780 and 1781 Hyder Ali's had overrun the Tamil country, his irregular cavalry spelling havoc in the tracts through which it passed. Thanjavur had already suffered grievously when the invading horsemen sought to enter the Tondaiman's territories at Adanakkottai in the May of that year. To this village's everlasting credit, it kept the marauders at bay. It did this in two manoeuvres. When the party entered the outskirts of the village, an enterprising Brahmin, Gangadhara by name, who was a linguist having travelled all over India, accosted the Muslim leader in Hindustani and invited him to partake of a feast that the village, would prepare in their honour. The cavalry, exhausted and hungry, sat down for the repast. While they were thus occupied a host of Kallars and Odaiyars encircled them. Hyder's men were suitably frightened by this show of strength enabled by Gangadhara's purchase of time, and thought it prudent to leave the village unharmed. When the enemy returned a few days later, the village was ready to meet it. A man concealed himself in the hollow of a tree and shot the commander of Hyder's force dead with a well-aimed arrow. Panic overtook the invading force which fled quickly. When news of the victory of the Tondaiman's forces (led by 'Sardar' Manna Velar, the Tondaiman's general) reached Sir Eyre Coote, the Commander-in-chief, he wrote to the Tondaiman that "he was gratified beyond measure to hear of the success."

Adanakkottai finds mention in a partially defaced inscription on the walls of a ruined Sasta temple, which refers to it as Adan-ur-kottai or the fort of Adan's village. No fortifications, however,

¹ *A General History of the Pudukkottai State*, by S. Radhakrishna Aiyar, 1916; pages 263-4. Also see 'Some Little-Known but Vital Incidents in Haider Ali's Carnatic Campaigns (1780-1782) by K.R. Venkatarama Ayyar, in the Indian Historical Records Commission, *Proceedings of Meetings*; Volume XXI (1944).

are to be seen in it. A Siva temple, believed to have been built in the reign of Kulottunga III, a shrine to Mariamman and an Aiyandar temple mentioned in the inscription referred to, are yet to be seen in the village.

There is in Adanakkottai a traveller's bungalow, built in 1833, for the use of the Collectors of Thanjavur, who were, at the time, ex-officio Political Agents of the Pudukkottai State.

Adanakkottai, in the eighteenth century, had been assigned by the Tondaiman's to brahmins as an inam of which fact the prominent agrahara or brahmin street is today a reminder.

AMBUKKOVIL.

Taluk	.. ..	Alangudi.
Population	.. ..	1,109
Distance from Pudukkottai	..	43 kms.

The *Akhananuru*, an old Sangam work, refers to a village called Alumbil. Inscriptions on stone¹ and copper also refer to a village with this name. Ambukkoil, in Alangudi taluk, is the later name for the same village.

Simple and apparently uneventful, Ambukkovil is a village of considerable historical significance. The first Tondaiman to have come to these parts from Thondaimandalam², Tondaiman Chakravarti, is believed to have settled at Ambukkovil. This Tondaiman came to the village in the train of a certain Venkatachala Pallavarayan from the Tondaimandalam on a mission set for the Pallavarayan by the Pandya King, Ugra Vira Pandya. After the errand, namely, the subduing of the Setupati Nandi Varman was over, the Pallavarayan was assigned lands near Ponnamaravati and the Tondaiman was granted lands at Ambukkovil.

¹ Pudukkottai State Inscription Number 522. The epigraph is on the eastern wall of the Siva temple at Ambukkovil.

² See under 'Nativity' in Chapter I, and Chapter II.

Tondaiman Charkravarti is regarded as an ancestor of the Tondaiman family that ruled Pudukkottai from 1686 to 1948. To what exact point of time Charkravarti and his fellow Tondaiman settled at Ambukkovil there are no records to show. A 1210 A.D. inscription, however, speaks of a service being instituted in the temple of Kunnandarkovil by one Perumal Tondaiman. Presumably therefore, the Tondaimans arrived in the region before the thirteenth century. A later inscription dated 1582 A.D. at Ambukkovil itself contains the name of one Anai Tondaiman, who may be assumed to be a close forbear of Avadai Tondaiman of Karambakkudi, the skilful subduer of Sriranga Raya's excited elephant ¹ and father of the first Tondaiman ruler of Pudukkottai.

On their journey from Tondaimandalam to Ambukkovil, the first Tondaimans according to Oppert's *Bharatavarsha* halted for a time at a village called Anbil north-east of Tiruchirappalli. This village was the centre of Anbilnadu, one of the twelve Tannarasu-nadu or independent districts. Anbilnadu was situated to the east of Tiruchirappalli, south-west of Thanjavur and north of Ramana-thapuram. Ambukkovil appears to have been part of Anbilnadu which, in fact, is referred to in an Ammachatram copper plate grant dated 1733 A.D. as Alumbilnadu, Alumbil having been the original name of Ambukkovil.

The family that ruled the former Pudukkottai State belonged to the division of Kallars popularly called the Ambunattu (or Anbu-nattu) Kallars, that is, Kallars from Ambukkovil or Anbilnadu.

At the installation of the rajas of Pudukkottai they have, every time, been consecrated by receiving holy water and flowers from the Siva and Vira Makali Amman temples at Ambukkovil.

AVADAIYARKOVIL

Taluk	.. .. .	Arantangi.
Population	.. .. .	5,931
Distance from Pudukkottai	.. 49	Kms.

1. See under 'Nativity' in Chapter I; Chapter II, as also Radhakrishna Aiyar's *A General History of the Pudukkottai State* (1916), page 115.

Tamil devotionalism, which was greatly popular in the sixth and seventh centuries A.D., found lasting expression in the hymns and sermons of the *Nayanars* (the Saivite saints) and the *Alvars* (the Vaishnavite saints). Of the former, the most popular were Appar, Sambandar, Sundarar and Manikkavasagar. Their hymns, says¹ K. A. Nilakanta Sastri, "form a varied treasure-house of religious experience which tells of mystical raptures and ecstasies, of moments of light when there is a vision of God and the world is transfigured in the light of his love, and of periods of gloom when all is dark and the blind seeker is filled with a sense of fear".

The outpourings of Manikkavasagar, though broadly of the same class as those of the others, were more impassioned and personalized. Manikkavasagar is by tradition believed to have been the minister of a Pandyan king, most probably Varaguna II (862-880). The temple at Avadaiyarkovil or Aludaiyarkovil in Arantangi taluk, is ascribed to the Pandyan minister. Legend has it that Manikkavasagar, who had been entrusted with certain funds to purchase horses for the State, decided to spend it on the construction of the temple called Avadaiyarkovil. Avadaiyarkovil, the name of the temple, has now become the name of the locality itself.

A significant feature of this shrine is that its sanctum sanctorum has no idol—an affirmation of the formlessness of the Ultimate. Worship is offered only to the open space enclosed within the sanctum where there are pedestals subsequently provided for offerings. This message of god's invisible form is, however, received by the pilgrim only after he has seen an eye-filling variety of carvings—plain designs, animal and floral motifs, human and divine figures. One special feature in the statuary of this temple is that in addition to the statues of rajas, zamindars and patrons there are statues of artisans and workmen also.

The temple is one of the renowned centres of Siva worship. Its dimensions, elaborate carvings and *sthalapuranas* mark it out as a temple of distinction. Pudukkottai's former ruins house has ancient links with the temple there being specific mention

1. *A History of South India* (1955).

created by the Tondaimans for the temple, until recently. This association dates back to 1800 A.D. Even prior to that period the Tondaimans are reported¹ to have 'looked after' the *puja* for one *kalam* or instalment of daily service. The Tondaimans endowed lands in the *ayan* village of Arasur (Tirumayam taluk) and a few others for meeting the expenditure on the first *puja* the (சிறுகாலச்சந்தி) in the Avadaiyarkovil. Besides this, they also purchased articles required for the festivals in the months of Ani and Margazhi. It was the responsibility of the Pudukkottai Tondaimans to provide persons who would pull one of the four car ropes (வடம்). The number of persons so deputed from Pudukkottai ranged from 1,550 to 2,000 at the rate of a single individual for every patta in the villages of Embal, Ichikkottai, Kurungalur, Enaṅgam, Arasur, Chatrappatti, Irumbanadu, Vellalavayal, Tornakkudi and Marudan-gudi villages of Tirumayam taluk.

A statue of Vijaya Raghunatha Tondaiman adorns the temple's Gallery of portrait sculptures.

The lore associated with this temple is contained in the *Tiruperundurair Puranam* and the *Tiruvachakam* authored by Manikkavasagar. The text of the latter has been rendered into English verse by the Christian scholar of Tamil, G.U. Pope.

The temple, which is now under the control of the Hindu Religious and Charitable Endowments Board, has recently been renovated so as to let light and air into the temple's sanctums and cloisters.

AVUR.

Taluk	.. ..	Kulattur.
Population	.. ..	846 ²
Distance from Pudukkottai	..	42 kms.

¹ In a note for the *Pudukkottai District Gazetteer* by P. M. Subramanian, Pudukkottai.

Appar, Sambandar, Sundarar are the *Devaram* trio and Manikkavasagar with his *Tiruvachagam* was of a slightly later cultural—chronological layer—around the 10th Century A.D.

² According to the *Karnam* of Avur, of the 846, Christians number 799, Muslim 29 and Hindus 18.

Avur¹ in the fifteenth and sixteenth centuries was a sparsely inhabited spot in the territories of the Palayakars of Perambur—Kattalur. Early in the seventeenth century Father Robert De Nobili of the Madura Mission extended its jurisdiction to Tiruchirappalli or Trichinopoly as it was then called. Trichinopoly, however, proved to be an uncertain centre. Frequent sieges and skirmishes between the Muslims and the Nayaks of Trichinopoly, forced Father Emmanuel Martins, the missionary then in charge of Trichinopoly to cast about for a quieter place in which to carry on the Missions activities. The Perambur—Kattalur Palayakars granted him in the site at Avur in 1686. After the palayam in which Avur was located ceased to exist as a separate unit, it passed into the hands of the Kulattur Tondaimans. When the lands of the Kulattur Tondaimans, in turn, were annexed to the domain of the Pudukkottai Tondaimans, Avur became a part of the Pudukkottai State.

One of the first missionaries at Avur, Father Venantius Bouchet who joined the Madura Mission in 1688, had ambitious plans, for the settlement. The padre was convinced that Avur should become a Christian centre of substantial importance. He made good use of the waste land found around the place and with the help of the charitable disposition of the Kattalur palayakar who gifted the land, raised a large compound enclosing a space for the use of the missionaries, the site of the church, and shelters for the benefit of visiting Christians. The chapel in particular engaged his imaginative attention. Feeling the need for having something stronger than mere mud walls and thatched roofs which, until then, had been the only materials used in Mission buildings, Bouchet resolved on a chapel worth its name. With contributions of money from local Christians as well as associates in France and with very little help from the Madura Mission itself, Bouchet brought the work to completion in 1697. The Tondaimans at Pudukkottai showed the same consideration to the Avur church which the Kattalur palayakar had. Father Martins, writing in 1713, states that Raghunatha Raya Tondaiman, the founder of

¹ Spelt *Aur* in old Mission records which explain the term as follows :

A = Cow ; and ur = village. The place was known as the 'village of cows' because of the large number of wild bulls and cows that came to drink water in a *oorani* on the outskirts of a jungle here.

the line of Pudukkottai Tondaimans, visited Avur in 1711 to meet the Bishop of Santhome, who was making his first pastoral trip to the Madura Mission and to Avur. The prince treated the visiting priest with great courtesy. This gesture by one who was not a Christian by religion is of obvious significance. The fortunes of the church declined very suddenly in 1716. One of the Annual Letters of the Madura Mission describes the event thus : " In those days of misrule, however, even a diploma and the good will of an energetic prince, especially if delivered in favour of Christians, counted for little. At any moment, the Rajah's good Will might be circumvented, under the plea of zeal for the protection of ancestral worship, or the prospect of rapine, or the seeming expediency of winking at the misdeeds of a strong subordinate chieftain. In fact, scarcely four years had elapsed since the granting of this diploma, when fears were entertained lest the persecution mania which had been fairly aroused anew in Thanjavur and the Madurai should spread into the Kingdom of the Tondaiman also. That those fears were not vain was soon made plain by a sudden raid on Avur, which happened in the following way. A leader of a band of freebooters, pretending to be sent by the Tondaiman, came suddenly with a strong following of soldiery and searched all the nooks and corners of the residence and church, in quest of the missionary and the supposed hiding place of his immense treasures. As the priest was then absent and no treasure could be found, the roving chieftain came back a second time and showed himself even more fierce and exacting than he had been on the former occasion. But, by that time, the missionary had ascertained that, inspite of his boasts, the chieftain had received no mission from the Tondaiman, but was a runaway from Trichinopoly, where he was pursued for bribery and embezzlement. Father Bertholdi accordingly sent his catechists with presents to the Tondaiman, in order to inform him of what was going on. The Tondaiman received the catechists favourably and even made some returns for their presents, which mark of kindness was sufficient to impress everyone with the persuasion that the missionary was not unprotected, and the latter consequently was left alone. Danger, however, was only averted in one quarter to come more threateningly from another. By 1716, exactly one year after the

preceeding scare new troubles arose. Owing to the dotage of the effeminate Nayakka ruler the Tondaiman had for a time, become all powerful at Trichinopoly; but this prince having now been supplanted and driven away from the Nayaka court by the newly appointed minister, Govindappa Iyer, the whole kingdom of the Tondaman became a prey to incessant inroads and tumultuous outbreaks. In one of these, some sub-chiefs, a sort of people, it is said, always hostile to the Christians, sent a body of men to sack and destroy the church. The men, however, kept back by some superstitious fear, did not dare to execute their orders to the full and were satisfied with pulling down the walled enclosures of both the compound and the church, for fear, they said, lest they should be turned into a fortress by the enemy. But emboldened by this exploit, the Tondaman's own son, who happened to come at this juncture, had the church itself destroyed to its foundations".

The chapel was rebuilt by Father Homem who worked amidst enormous dangers and difficulties. He shifted the site from the old spot selected by Bouchet to a new one about two furlongs to the south-east. He started the execution of the new construction on a large scale and much on the same plan as the destroyed church. The work begun by Father Homem was concluded in 1747 by his successors. The chapel seen in Avur to-day is this monument. Built in the form of a cross, 240 feet in length, 38 feet in width and 28 feet in height, its eight columns support a dome 56 feet above the pavement.

When in 1732 the Nawab of Arcot sent an expedition under Chanda Sahib to exact tribute from the kingdoms of the South; the Tanjore, Madurai and Pudukkottai tracts were gripped by a general turmoil. The auxiliary troops roamed the countryside "setting the towns on fire, driving away the cattle and destroying the crops". The celebrated Tamil scholar and padre Father Constant Joseph Beschi was in temporary charge of the Avur church at this time. The following incident is narrated in *General History of Pudukkottai State* (1916): "Some soldiers of the Tondaiman, having managed to steal some bullocks from the Mughal army not far from Avur, the Mughal soldiers became furious, and coming to the Missionary required him either to return the

bullocks immediately or to surrender himself to them as prisoner. The missionary that had to answer the charge was Rev. Fr. Beschi who was then in temporary charge of Avur. As getting the bullocks back was not in his power, he quietly submitted to the alternative proposed by the soldiers. The infuriated soldiers immediately chained him and led him to their camp amidst insults and menaces, and as they found that their prisoner bore all the ill-treatment with unruffled equanimity, they became so exasperated that they had him tied, and, stripping him of his clothes, exposed him to the midday sun. As soon as this however came to the knowledge of the chief, Chanda Sahib, he issued immediate orders for the prisoner's release¹. The chief tenderly embraced the missionary and told him to sit by his side ; then he protested that what had happened to him had been done without his knowledge. Having witnessed the honour paid to the missionary the soldiers, who, a short while before, had insulted him, began also to do him honour. As a matter of fact, the danger the Father had incurred became the occasion of his safety and that of the village".

Avur today is not the centre that Bouchet dreamed it would be. But it brings to mind the services and dedication of a series of missionaries who came to this village from Europe in what they believed was their ordained mission.

KILANILAI

Taluk — Tirumayam.

Distance from Pudukkottai: 33 kms.

The name Kilanilai means 'the eastern gate' (or site), as distinguished from the adjacent village called Melanilai or 'the western gate'. Between them is Pudunilai. *The Manual of the Pudukkottai State* (1944) states: "From the days of the imperial Cholas and Pandyas up to the nineteenth century, Kilanilai was an important military station. According to the Ceylonese chronicle, the

¹ From Rev. L. Besse's account of the incident in *Father Beschi: His Times and writings* (1918) it would appear, however, that the chief who released him etc. was not Chanda Sahib himself, but a subordinate and that Beschi met the Supreme Commander later.

Mahavamsa, a line running from Ponnamaravati to Kilanilai and thence to Manamelkudi in the Thanjavur district, divided the Chola and Pandya dominions in the 10th and 11th Centuries, before the final subjugation of the Pandyan kingdom by the Cholas. This line marks the northern limit reached by the Sinhalese in their invasion of South India. Parts of the 12th—13th century strategic road leading from Kilanilai to Arantangi in the east and to Tiruppattur and Ponnamaravati in the west can be seen even now. About the middle of the 12th century, the Ceylonese general Lankapura, who was in alliance with Parakrama Pandya, defeated Kulasekhara, a rival claimant to the Pandyan throne, who had killed Parakrama (C. 1162 A.D.) and placed Vira Pandya, Parakrama's son, on the Madura throne. During this campaign, a sanguinary battle was fought at Kilanilai in which, according to the *Mahavamsa*, the slaughter was so great that the corpses of the slain covered a space of four leagues. Kilanilai was one of the frontier forts of the Tanjore kingdom under the Nayaks. Vijaya Raghava, the last Nayak ruler, is the reputed builder¹ of the fort, now in ruins."

The *Statistical Account of Pudukkottai* (1813) informs us that the fort which had an arsenal was built about 1683 by a Setupati. It is probable, according to the *Manual*, that this Setupati, who got possession of the fort, repaired or extended it by adding an arsenal. In 1756 when the place was temporarily occupied by Vijaya Raghunatha Raya Tondaiman of Pudukkottai, a granary was built to provide against sieges. The fort passed through different hands over a time, including Tanjore and Ramnad, before coming to Pudukkottai. It was afterwards part of the debatable land which passed from Ramnad to Tanjore in 1750 and 1763 and again in 1771. The fort and district of Kilanilai were promised to the Pudukkottai Tondaimans in 1723 by Tanda Tevan of Ramnad, if he succeeded in gaining the throne with the Tondaiman's assistance. Tukoji, Raja of Tanjore (1729–36), also appears to have granted it to the Tondaiman, who sold it back to Tanjore on certain conditions. The conditions were violated and the Tondaiman attempted to re-capture it. In

¹ See the Trichinopoly and Tanjore Manuals.

1749 Manoji, the Tanjore general, ceded it to the Tondaiman on his own account in return for military assistance, so that the Tondaiman actually got possession of it. But the Raja of Tanjore refused to ratify Manoji's act and ordered its recovery. This happened in 1756. Hyder's forces seized and occupied it for a time in 1781, but the Tondaiman re-captured it in the August of the same year at the request of Colonel Braithwaite of the Madras Army. When, soon after this, the whole of the Tanjore territory was annexed by the British, Kilanilai, which originally formed part of Tanjore but had all along been claimed by the Tondaimans, was finally ceded to Pudukkottai. The only condition imposed was the payment annually of the tribute of an elephant. This, however, was never paid, on the ground that the stipulation was inconsistent with previous treaties, and with the rank and status enjoyed by the Tondaimans. It was formally waived in 1837 by the Court of Directors themselves.

This extensive but now dilapidated fort is built of laterite, quarried in the extensive Sengirai patches. The area enclosed by the fort walls is 43.61 acres. Within the fort is a small temple to Hanuman. A temple to Ariyanayaki is the principal shrine within the fort. Behind this is the Ammankulam, to the south of which is a Vishnu temple. A magazine was located near the southern gate, adjoining which are a shrine to Munisvara and an urani. There is an underground passage, now blocked, near the southern gate. Tradition says that this secret vestibule led to the fort at Sakkottai in the Ramnad district.

KODUMBALUR

Taluk Kulattur.

Population .. 3,428.

Distance from Pudukkottai .. 40 kms.

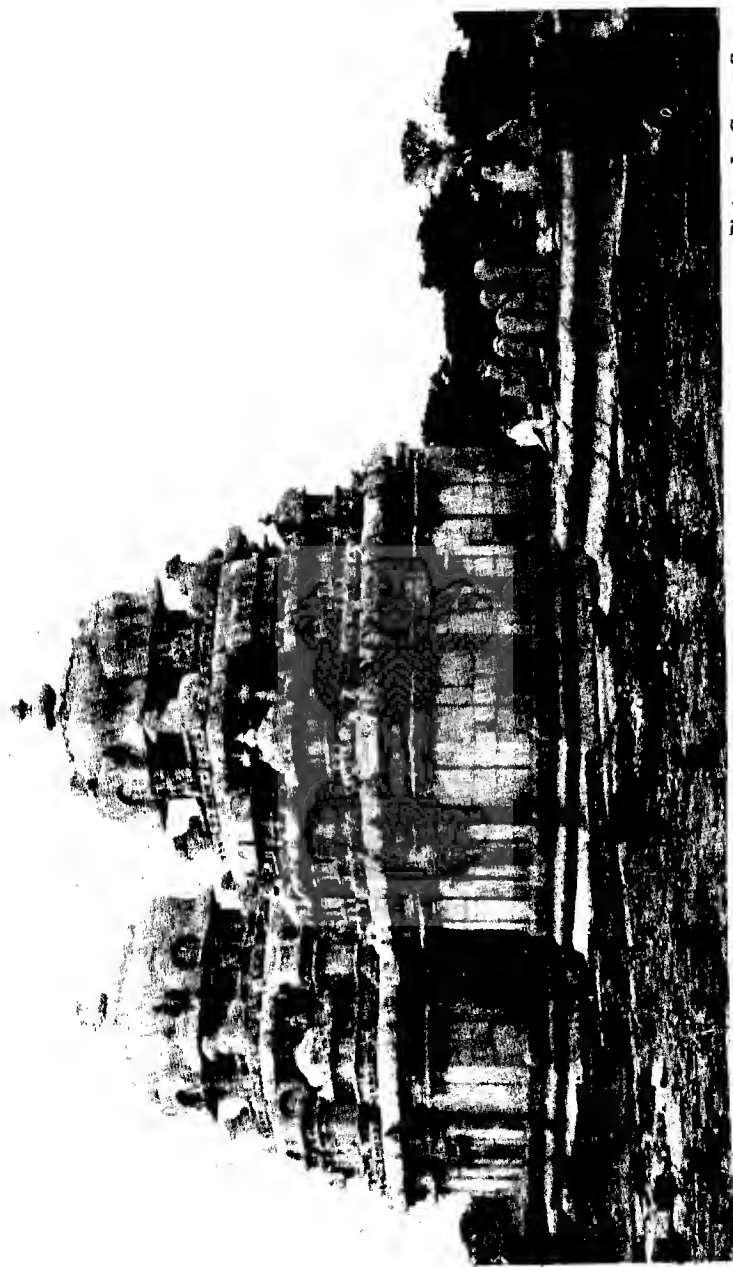
Kodumbalur is the site of some structural temples of great beauty. Their merit marks them out as among the most outstanding monuments in South India.

Kodumbalur also happens to be one of the most ancient places in the district. The *Silappadikaram* mentions Kodumbalur (Kodumbai) as lying on the highway between Uraiyur, the Chola capital

and Madurai the Pandyan capital. The *Periyapuranam* calls it the apex city¹ of கோளுடு or the settled tracts. Kodumbalur was the seat of a flourishing State, ruled by a dynasty of Velirs called Irukkuvels, who were connected by blood with the Cholas but politically were subordinate to them. M. Arokiaswami writes in his excellent study entitled *The Early History of the Vellar Basin* (1954): "... the Irukkuvels have indeed played a very important part in the moulding of South Indian history and politics first as the supporters of Pallava hegemony and then that of the imperial Cholas, supporting the former as powerful feudatories at Kodumbalur and the latter as responsible officers." The Velirs claimed to be Yadavas from Dvarasamudra, and one of the chiefs assumed the title of Yaduvamsa. Idangalinayanar, who is revered as one of the 63 Saiva saints, and mentioned in the *Tiruttandakam* by Sundaramurti (6th-7th centuries), was a king of this dynasty. The Chola king vijayalaya (C. 830 - 850 A.D.), the founder of the Imperial Chola line, and his son Aditya were connected with this dynasty.

The terrain north and south of the traditional line — the Vellaru — was deemed to be respectively part of the Chola and Pandya country and, from the middle of the sixth century to about the middle of the ninth, it lies in the oscillating borders of the two powerful empires of 'Tamilakam': the Pallavas on the north and the Pandyas on the south of the Cauvery, the earlier Cholas of the Cauvery region having gone into eclipse. The tract was for most of the time directly under the Muttaraiyar and Irukkuvel chiefs, who, as rulers of the border, constantly changed their alliance with one or the other of the greater powers—Pallava and Pandya. Mahendravarman I's Pallava Kingdom (580—630 A.D.) does not seem to have stretched beyond the Cauvery. This was the case until the time of the Pallava Dantivarman (796—847 A.D.). During this period, the Pandyas had sway over the tract south of the Cauvery, with the chiefs of the area now and then recording their inscriptions as if independent of the suzerains in whose regnal years they were wont to date them otherwise. Thus the monuments and inscriptions of this period relate to the Pandyas, Muttaraiyars, and Irukkuvels, with the Pallavas coming into the picture

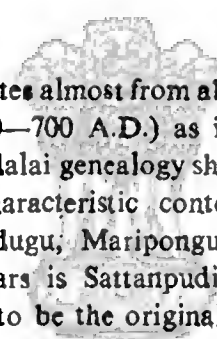
¹ Konattakkodiyagaram.



The Muvarkovil shrine

Photo : L. Ganasa Sarma

with their inscriptions in the second half of the eighth century only, after establishing hegemony over the Muttaraiyar and Irukkuvel chiefs. The last of the Pallavas we hear of in the area is Nripatunga (859—899 A.D.) an inscription of whose dated 866 A.D. is to be seen at Narttamalai. After the famous battle of Tirupurambiyam wherein the Cholas inflicted a crushing defeat on the Pallavas and Pandyas, the territories of the Muttaraiyars and Irukkuvels came under the Cholas. Inscriptions in the area provide many synchronisms among the various kings—Pandya, Muttaraiyar, Irukkuvel, Pallava and Chola—often indicating matrimonial in addition to political relations. What concerns us directly here is the impact of these events on the Kodumbalur—Narttamalai tract.



Muttaraiyar rule dates almost from about the time of the Pallava Paramesvara-I (C. 670—700 A.D.) as its correlations with three early chiefs in the Sendalai genealogy show (the Muttaraiyar chiefs, have appropriated characteristic contemporary Pallava titles—Videlvidugu, Perumbidugu, Maripongu). The most outstanding among the Muttaraiyars is Sattanpudi *alias* Videlvidugu Ilango Adi Araiyan, reputed to be the original builder of the Vijayalaya Cholisvaram in Narttamalai, and the son of Kuravan Sattan, the excavator of the Malaiyadippatti cave temple. He was, besides the father-in-law of Sattan Maravan Pudi *alias* Bhuti Vikramakesari or Maravanpudi, builder of the famous Muvarkovil complex at Kodumbalur. The Irukkuvels, by their classic Kodumbalur record (of Bhuti Vikramakesari) when studied in comparison with their other records elsewhere, would appear to have surfaced as a power at a time that is co-eval with Maravarman Rajasimha-I Pandya (730—765 A.D.) and to have continued upto the rise of the Chola, Vijayalaya's line (c. 850 A.D.). They continue their independent status thus far and later appear to get closely affiliated in a subservient capacity to the imperial Cholas. This arrangement continues through the reigns of Bhuti Vikramakesari's sons, Parantaka and Aditya respectively, ending with Siriya Velar, a son of the former serving Sundarachola (957—973 A.D.) as a

general in the army. As a result of such correlations, regional and dynastic studies of the idiom of architecture and sculptures have been rendered more meaningful. These integrated studies have also led to the dating of Vikramakesari and his Muvarkoil complex in the last quarter of the ninth century A.D. as against their contemporaneity postulated earlier by Prof. K. A. Nilakanta Sastri with Sundara Chola in the second half of the tenth century.

Kodumbalur after its long spell under the Cholas and the later Pandyas between the 9th and 14th centuries must have been destroyed during the Muslim invasions. Local tradition has it that Kodumbalur once supported as many as 108 Siva temples. This is borne out to an extent by the discovery of lingams, nandis and other sculptures wherever the Kodumbalur soil is dug up. Loose sculptures, partly visible on the surface soil and partly buried, are noticed quite often in the vicinity.

Of the three shrines comprising the Muvarkovil¹ of Kodumbalur referred to above, only the central and southern now stand. The plinth alone of the third or northern shrine remains. All the shrines are west-faced. They are each about twenty feet square at the base, and have an ardhmandapam which is about eighteen feet square. In front of these is the base of what must have been either a dhavajastambham. Surrounding this group are remnants of 14 out of the original 16 symmetrically arranged sub-shrines, each of which had a garbhagraham and an ardhmandapam. These sub-shrines were encircled by the tirumadil, a massive stone wall with two openings, one of them a water gate leading down by a flight of stone steps to a circular stone well 10 in diameter and the other on the west a gopuram entrance.

The plinths of the three shrines rest on a lotus base. Above the kumudam runs a frieze of vyalas with makara heads, with human figures inside the mouths.

The niches in the walls are surmounted by makara toranas, while friezes of bhutaganas (cherubs) playing on different kinds of musical instruments run on the top of the walls. Over the cornice are the vyalavari with projecting makara heads at the corners. The vimanam is of three tiers, diminishing in size. The

¹The term means 'temple of the threesome'.

lowest has niches surmounted by 'wagon-shaped' tops, reaching up almost to the top of the tier above. The second tier contains pilasters on either side of the wagon tops. In the top tier are the square grivam with niches with bas-relief sculptures and the square sthambam.

No lingams are to be seen inside these shrines. A complete lingam and the fragments of two others have, however, been dug up in excavations. The walls and the vimanamams contain sculptures of Ardhnarisvara, Vinadhara Dakshinamurti, Gajaramurti, Antakshurasamharamurti, Kiratamurti and Sankaraya Narayanamurti. Except for two specimens which are exhibited in the Museum, all the loose images of this temple are kept on the site and form a fine gallery of early Chola sculptures. They resemble Pallava sculptures in their broad form and proportions but bear more decorations. Fanciful interpretations have been given to explain the term 'Muvur'. One states that the salva saints Appar, Sundarar and Manikkavasagar constructed one shrine each. Another claims that the Muvarasar or the three kings—the Chera, Chola and Pandya built one each. Yet another ingenious interpretation is that the shrines were intended to house the trimurti—Brahma, Vishnu and Siva, one in each.

The temple's architectural features and the Pallava grantha inscription in the central shrine giving the genealogy of Bhuti Vikramakesari,¹ however, relate the shrine to the early Chola period. Bhuti Vikramakesari expressly states that he built the three shrines, one on his own part and the other two for his wives, Karrali and Varaguna as his own inscription on the Vimana wall proclaims.

M. Aroklaswami in his book *The Early History of the Vellar Basin* writes : "The famous Muvarkovil attributed by the Kodumbalur inscription to Bhuti Vikramakesari is as much to be noted for its architectural style as for its archaeological value". The most characteristic feature, however, is the image of the big nandi

¹ Vikramakesari flourished as an independent chief prior to Vijayalaya, the founder of the Thanjavur chola line (C. 850 A.D.) as discussed above. Earlier Prof. K. A. Nilakanta Sastri has said in his *Cholas* that he was an ally and vassal of Sundara Chola Parantaka II (C. 966-973 A.D.)

set up on the vimana, a style that comes to be adopted in South Indian architecture only in the time of the Pallava Narasimhavarman II, as again found at Narttamalai, and many other places. Besides the temple, there is a large measuring 6' 8" high, 9' 6" long and 10' 6" round the body, that it is second only to the huge one that afterwards appears in the Rajarajeswara temple at Thanjavur.

The Muchukundesvara temple is another early Chola shrine and is believed to have been built early in the later half of the 10th century by Mahimalaya Irukkuvel also called Parantaka Vira Cholan of Kunjaramalan or Bhuti Parantaka, about the 14th year of the reign of the Chola Emperor Parantaka-I (C. 907--953). The *Manual* (1944) describes the architecture of this shrine thus. "The main shrine consists of a garbhagrham and an ardhmandapam facing east. The closed mahamandapam and the Amman shrine are later structures. Only four of the seven sub-shrines characteristic of early chola temples now stand. The walls of the main shrine are adorned with four-cornered pilasters with kalasam, padman and palagai on top. The corbels are decorated with a roll-moulding with a median band of the Pallava type. The arches above the figure niches are surmounted by makara toranas. The kudus have trifoliated finials. Above the cornice are friezes of bhutaganas and vyalas, from the corners of the latter of which makara heads just out. The stone cupola resembles that of the Tirukkalalai temple. Among the images exhibited in the Mahamandapam is a prismatic lingam of the Pallava type, which probably belonged to the Aintall noticed below. The temple seems to have been repaired in the 13th century when the mahamandapam was built. Of the stone wall enclosing the temple only some parts now remain. There is an ancient circular stone wall in the temple measuring 6' 9" across, said to have a tunnel 2' 9" in width below, probably inlet for water from the tank behind the temple."

The Aivarkoil or Anitali ('The Five Temples') excavations in a mound a little to the south-east of Muvarkoil have exposed the plinth of an interesting Siva temple. The *Manual* says of its aesthetics: "The garbhagrham contains an inner sanctum enclosed by a narrow circular prakaram (wall) against the (square outer) wall of which are four attendant shrines. All the five shrines have

a common base or plinth, and now contain only the broken pedestals of lingams ; that in the central shrine is larger than those in the sub-shrines. In front were a pillared ardhmandapam and a mahamandapam of which the plinth alone now remains. This plinth is lower than that of the main shrine. The ardhmandapam was a closed structure ; the mahamandapam which was supported by sixteen pillars had a verandah all round. Two flights of steps, one on the north and the other on the south, lead up to the ardhmandapam, and two others to the circumambulatory passage of the central shrine. The smaller sanctums at the four corners have also flights of steps leading up to them. On the balustrades of the steps are carved stone figures of dwarfs blowing conchshells. In the extreme west was a pillared nandimandapam... Except fragments of walls over the plinth of the central shrine, there is nothing definite to indicate what the superstructure of the garbhagrham was like. The important finds include friezes of dwarfs and of elephants, bulbous tops of polygonal pillars, corbels and corner pieces of the cornice, a nandi an idol of Durga with four arms, one of Vishnu, also with four arms, and six of dvarapalakas. The corbels are of the bevelled type without roll-ornaments. The kudus have scrolls of foliage inside which are two human heads-male and female-wearing a peculiar head-dress.

The earliest inscription found on the plinth of the mahamandapam in this much-ruined structure is, according to K. R. Srinivasan, of the Chola Aditya I—C. 866 A.D. He describes¹ the temple as “an early Irukkuvel structure constructed of mixed stone and brick as the later Pallava structures elsewhere are and stylistically affiliated to the decadent Pallava style with the local Irukkuvel idiom”.

The antiquity of the place would go to centuries much earlier even to the *Silappadikaram*, as suggested by the remains of a megalithic urn-field in the open area in front of the Vattam Katcheri and behind the Nandi.

Excavations conducted by K. R. Srinivasan at the site of an ancient temple in a place a few hundred yards south of the Aivarkovil, brought to light an exquisitely carved group of sculptures of the early Chola period, consisting of Tripurantaka, Tripurasundari and the Tripava demons. Removed to the State Museum

¹Note for the Pudukkottai District Gazetteer.

it has since been taken over to the Madras Museum, leaving a plaster replica in the Pudukkottai Museum. It is perhaps the finest sculpture of the region.

The full historiographic potential of Kodumbalur is yet to be explored. The archaeologist's spade is bound to reveal in the years ahead many more facets of Kodumbalur's past which, in turn, might throw light on the dark corners of the history of the region.

KUDUMIYAMALAI

Taluk : Kulattur.

Population : 1,563.

Distance from Pudukkottai : 20 kms.

Called in earlier inscriptions Tirunalakkunram, and in later ones Sikhanallur¹, Kudumiyamalai contains a temple of considerable votive as well as archaeological interest.

The principal idol worshipped in the temple here is named Sikhanatha, or the 'lord with the tuft'. This strange name is explained by a local legend. A temple priest according to the story, once gave his sweetheart the flowers intended for divine worship. The ruler of the place, who came unexpected to the temple shortly thereafter was given as prasadam the flowers that the lady had worn. The Raja, discovering some locks of hair among them, asked the priest how they got there. To conceal his offence the priest asserted that the hair must be the deity's all the while praying that he might not be proved untruthful. His prayer was heard and a kudumi or lock of hair miraculously appeared on the lingam for the raja's inspection. A small protuberance on the idol is still shown to the visitor as the kudumi that originally appeared to save the priest-lover. It must be remembered here that the God of Kalahasti whom Kannappa Nayanar worshipped was called Kudumae-t-tevar.

¹ Sikha is the Sanskrit for Kudumi which means a 'lock of hair'.

The ayirakkalmandapam or the mandapam with a thousand pillars, is what the visitor enters first. It is in ruins. The form and features of the inner Mandapam are characteristic of the architecture of the Vijayanagar period. He passes from this to another, larger mandapam, on both sides of which are pillars which bear large sculptured figures of Ganapati, Subramanya, Ravana, Ugra Narasimha in the act of tearing the entrails of Hiranya, Rama, Mohini the enchantress, some Samghara or destructive forms of Siva, Virabhadra, Kali, Nataraja in the Urdhvatandava pose¹; two images of Vishnu, one on Garuda and the other on Hanuman; Rati, Manmatha, and portrait sculptures of Nayak or Pallavaraya chiefs and their ministers or vassals. The portrayal here of figures of horsemen treading over the footsoldiers is of particular interest. One can see here weapons used respectively by the horseman and the foot soldiers and the method in which the footsoldiers defended themselves from the attacks of the horsemen. Two huge four-armed dvarapalakas with tusks, guard the way to the Gangaiyaran Koradu or annexe built by a Gangaiyataya chief, and a mandapam built in the Pandya style. This contains idols of Nataraja and Sivakamasundari as well as bronzes of Somaskanda and Chandrasekhara, all belonging to the late Chola or Pandya period. The inner mahamandapam is a late Chola structure containing other bronzes—Ganesa, Subrahmanya, Chandikesvar, Sasta Manikkavasagar, Sundaramurti, Sambandar, Bhikshatana-murti, Pidari.

The original sanctum must have been late Pallava or early Chola. It appears to have been renovated twice, once in the Pandya period and again in the Vijayanagar period. Two-armed dvarapalakas in the ardhmandapam which resemble those of the Vijayalaya Cholavisvaram at Narttamalai, a ninth century structure and a Pallava Valamburi² Ganapathi exhibited in the first prakaram, is also significant. The prakaram encloses a cloistered pathway the pradakshna against the Prakara walls of which are sculptures of the Saptamatrkas, Lingodbhava murtis, Saiva saints, Jyestadevi, Subramanya, Gajalakshi, etc., dating to different periods. The later renovators appears to have carefully preserved the sculptures of the earlier periods. In niches in the walls of the sanctum are

¹ With the right leg uplifted.

² With his trunk curled to the right.

PLACES OF INTEREST

Dakṣināmurti, Viṣṇu, Brahma and Durga. A pillar on the rear, or the shrine's west contains a sculpture of some chief, probably a Pallavaraya who renovated the shrines and the ardhamaṇḍapam.

On the rock to the south of the rock-cut cave temple called Melakkovil on the hill at the rear of Sikantha temple and between the two Pallava Ganeśas, is the famous Pallava Grantha inscription on music. In a good state of preservation the epigraph script resembles more or less that of Mahendravarman's inscriptions at Tiruchirappalli and in the South Arcot district. It has consequently, been generally assigned to the early seventh century. The existence of this inscription was discovered in 1964 by Krishna Sastri in 1904. Bhandarkar edited it in the *Epigraphica Indica*, Vol. XII. The area covered by the inscription is 13' × 14'. The wall and basement of the maṇḍapam in front of the Melakkovil hide parts of the last section of the inscription.¹

The importance of this inscription is emphasised in the *Epigraphica Indica*. It is the only treatise on music now extant between the earlier Nāṭya Sastra of Bharata (4th century A.D.) and Saṅgadeva's *Saṅgita Ratnākara* (13th century).²

In her learned book entitled *Administration and Social Life under the Pallavas*, C. Minakshi seeks to connect the inscription with Mahendravarman's damaged inscription at Mamandur. K. R. Venkatarama Ayyar, however, observes in his *Note on the Sittannavasal and Kudumiyamalai Monuments*³: "It is really surprising that scholars should attribute its authorship to Mahendravarman I

¹ A similar script is noted in the Pandya country and early Pandya cave monuments also.

² Bharata's *Nāṭya Sastra* while defining different jatis does not give actual examples in notation. Saṅgadeva's book includes notation, but it is so much later than Bharata's work that the author cannot be regarded as a first-hand exponent of Bharata's music. "In these circumstances it is easy to imagine the great value of the discovery of any noted music belonging to a period earlier than that of the *Saṅgita Ratnākara*. The Kudumiyamalai inscription supplies such music". (*Epigraphica Indica* Vol. XII—Jan. 1914).

³ Published in *Transactions of the Archaeological Society of South India* 1936-57.

The text begins with the invocation *Siddham namah sivaya*, and runs into seven sections, each arranged in sub-sections of sixteen sets of four svaras, each under an appropriate heading the colophon reads *sri rudrachar yastsyena parama mahesvarena rajna stsyakitharmkrtah svaragamah* ('composed for the benefit of learners by the king, a staunch Mahesvara and a disciple of Rudracharya') There is not a single inscription definitely ascribable to Mahendravarman that does not contain one or more of his numerous surnames in Sanskrit, Tamil or Telugu, and not a work of his that is not presented with a flamboyant string of epithets. One would expect a work of the nature of this unique musical composition if only Mahendravarman had composed it to be heralded in high-sounding verses full of self-adulation. Nor on the other hand do we find in any of his inscriptions or in his play *Mattavilasa* the invocation *siddham namah sivaya*. In his *Mattavilasa* Mahendravarman holds among other sects the Mahesvaras and the Mahavaratins to ridicule as a degenerate crowd addicted to drunken revelry in the company of women. It is obvious that Mahendravarman who pours so much invective upon the Mahesvaras will not call himself a 'parama mahesvara' Kudumiyamalai was included in the old territorial division of konadu, the capital of which was Kodumbalur, which was an important seat of the Pasupatakalamukha cult ; one of its rulers was a canonised Saiva saint, while another—a later one, Vikramakesari, endowed a matha for his Kalamukha preceptor and provided for the daily feeding of the latter's disciples. One may not be wrong in thinking that the king who calls himself a 'parama mahesvara' may have belonged to the distinguished line of Irukkuvels of Kodumbalur".

Minakshi, moreover, renders the word *jati* as tala and sankir-najati as a new kind of tala invented by Mahendravarman. Prof Sambamurti translates¹ *jati* as raga and points out that *jati* was used wherever raga was meant. The Kudumiyamalai text according to Sambamurthi, "is the first record to mention the solfa names of the

¹ Besides Dr. Bhandarkar, Dr. Minakshi and Prof. Sambamurthi, many other scholar musicians have attempted to interpret the inscription among whom may be mentioned Swami Vipulananda and Dr. S. Ramanathan.

seven notes, *sa, ri, ga, ma, pa, dha*, and *ni*, where the srutis are designated by resorting to the vowel changes in the name of the note and reduced to a mnemonic system of absolute notation."

On the top-right of the inscription is a label which reads "Pari-vadiniye". The word refers to an old kind of lute with seven strings. The music of the inscription was apparently intended to be played on the seven-stringed *parivadini*. In the inscription on the rock face of the mandapam of the Siva cave-temple of Tirumayam also, the word occurs as again in association with rock-cut cave temples, of Tirugokarnam and Malaiyakkoil and on the facade of the small cave temple in the Tirumayam rock higher up. Two sculptural representations of this stringed instrument can be seen on the panel within the Vishnu cave-temple at Tirumayam, and the other built into a wall in the Mahisasuramardini temple at Killukkottai.

The 120 inscriptions in Kudumiyamalai, some of which are of great importance, help to trace the history of both of Kudumiyamalai, and of the region. Earlier scholars assign the origin of the Melakkovil rock-cut temple to the epoch of Mahendravarman I, early in the 7th century. But it is of Pandya origin dating slightly after him. "Next in date", says the *Manual*, "comes the shrine of Sikanatha referred to as Tirumulattanam" and concludes that the shrine was in existence before the 9th century.

The early Chola inscriptions are either in the Melakkovil or on the walls of the second prakaram, but not in the main shrine of Sikanatha. This suggests that the shrine was remodelled as indicated by its iron inscriptions. Tradition ascribes the remodelling to the time of Maravarman Sundara Pandya I. The successors of Maravarman Sundara Pandya also evinced great interest in the growth of the temple. For half a century from about 1215 to 1265 A.D., the old mandapams were renovated, and additional structures were put up with the co-operation of the nadus, nagarams, urs and padaipparrus of Konadu as well as private persons. A quota to be paid by every person living with 24 kadams (one league) of the village was fixed and the temple collected contributions in money and, in kind. A significant measure of support came from a devadasi

Umaiylvi Naacci¹, also referred to as the daughter of Durgaiyandar who bought some of the temple's lands for 73,300 current gold *oolas*. This woman was clearly a philanthropist, building the Amman shrine adjoining the cave temple and consecrating the goddess Malaiyamangai or Saundaranayaki. The temple acquired lands, gardens, and wells in the villages of Visalur, Pinnangudi, Marungur or Marunguppatti and Karaiyur, in addition to Melamanallur mentioned above. During this period the nadu to which Kudumiyamalai belonged seems to have been administered by Gangaiyarayas and Vanadarayans of Bana chieftains as vassals of the Pandyan kings. On the gopuram of the temple are inscribed verses in Tamil²; five of them are in praise of a Pandya king, and five others in praise of a Bana chief³.

Kudumiyamalai felt the influence of the Vijayanagar administration, its prince Vira Kampana Udaiyar figuring in inscriptions. Another Vijayanagar viceroy mentioned here is Gopa Timma of the Saluva family.

During the period of the Madurai Nayaks and afterwards, the Marungapuri chiefs owned territories which extended to within a few miles west of Kudumiyamalai, and the Vaittur-Perungalur Pallavarayars extended their conquests westward and brought the village of Kudumiyamalai under their rule. Sevendelunta Pallavarayan who was a devout Saivite, is said to have added to the temple, gopurams, mandapams, halls, flower-gardens, and groves, and built cars for it.

Raghunatha Raya Tondaiman (1686-1730) and his Minister Kurunta Pillai built the front mandapam of the rock-cut cave shrines, and Vijaya Raghunatha Raya Tondaiman (1730-69) built the steps, to the mandapam. His chief military officer, Raghunatha Servaigar, son of Lingappa Servaigar, dug the tank to the north of the temple known as Sengalanirodai, and built steps on its banks.

¹* P.S.I. 319 calls her Naacci, but P.S.I. 366, 369 and 329 Periyanaacci.

² One of them is attributed to the poet Pugalendi.

³ The Bana is referred to as Viramagadan Ponparappinan.

Pacchai Tondaiman, who disputed in 1730 the succession of **Vijaya Raghunatha Raya**, took shelter within the walls of the temple and was besieged by the latter's forces until he surrendered. **Vijaya Raghunatha Raya** was crowned in this temple. The mandapam in front of the Bhairava shrine is said to have been built by **Ramaswami Aiyar**, who was Karbar of the **Pudukkottai State**. In 1865 **Raja Ramachandra Tondaiman** celebrated a kumbhabhisekham in this temple.

MADATTUKKOVIL.

Taluk Kulattur.

Population ..

Distance from Pudukkottai .. 38 kms.

Some furlongs from Marudampatti village is a beautiful ruin or, more accurately, two ruins. Known by the name Madattukovil the site contains remnants of an old (probably Chola) outer prakaram in dark granite, enclosing a younger (most probably Vijayanagar) structure in pink gneiss. The latter has evidently been built on the spot of an earlier structure that existed coterminously with the earlier prakaram. The free-standing temple in pink is bereft of a vimanam and the sanctum with a linga inside is, in fact, open to the sky. The impression conveyed by the central structure is of incompleteness. It is not inconceivable that the builder of this shrine had to leave his work half finished owing to the passing of the territory into other hands. Whatever be the reason, the structure appears unfinished or, as it were, stopped,—a fact that adds poignancy to the temple's beauty.

The temple is an exquisite monument. The kumbhams with beaded ornamentation, the festoons on each side of the shafts above them and the brackets of the kapodam on top and the upapitha or plinth with the grooved kumudam and kudus with the central

rosette and the flowing foliage on each side reveal an intricate sensibility. The features belong to the Vijayanagar style (1350-1600 A.D.). "...the cornice and the decorated panels", says the *Manual of the Pudukkottai State* (1944) "Exhibit consummate artistic skill and delicacy". The panels depicting the five great Puranic Rsis, Pulastya, Visvamisra, Bharadvaja, Jamadagni and Agastya ; the Devi worshipping a lingam ; the bhutas revelling in music and dance ; Subrahmanya on his peacock ; Krishna dancing on the serpent Kalinga and the elaborate scroll are of exceptional merit.

The lingam in the shrine is the most weather-beaten object in the site and probably predates even the prakaram. An Amman shrine stands to the north-west of the Siva shrine. It consists of a garbhagraham without a superstructure and a closed ardhamandapam. The idol of the Amman is gone.

P.S.I. 1107, an undated inscription, indicates that Virasinga Panman (Varman), an officer of a Gangaiyaraya chief built the central shrine in its present form¹, replacing the original shrine. From an inscription (P.S.I. 140) of the twelfth year of Rajadhiraja II which records an endowment to the goddess, we may infer that the Amman shrine was in existence in 1179 A.D. The other inscriptions except two belong to the Chola and Pandya periods, and mention grants to the idols, for the institution of festivals and for repairs to the temple.

The site has recently been paid much-needed attention by the Archaeological Survey of India.

M. Krishnan, who has photographed the Bhairava image in the shrine, writes : 'In February 1975 Thiru Rajagopals Tondaiman the Raja of Pudukkottai when it was a princely state, took me to see a singularly beautiful Devi idol in the out-of the-way shrine (Madattukovil). When we reached Maruthampatti, we found the temple abandoned and overgrown with weeds : someone had taken away the Devi idol, and a number of old stone

¹ The expression திருவெடுத்துக்கட்டி suggests that the shrine which had been is shrine was rebuilt.

figures, chipped or broken into pieces, were on the floor of the temple and in the thrown-bush around. Among these was the torso of a figure that attracted me, though at that time I did not identify it as the figure of Bhairava. A member of the party located the bottom half of this figure, featuring a dog, and under my supervision and with much effort the others moved the bottom half against a wall and lifted and set the top half on it to reconstitute the figure, and I photographed it.

Subsequently, I realised this was in fact the classic figure of Bhairava, and an exceptionally fine one. I cannot determine its age but perhaps it is nine or ten centuries old. I inspected many Bhairava figures in many places (at least a dozen within Pudukkottai district—being rich in Siva temples, there are many Bhairava figures here) and studied the prescribed iconography of the figure, and also studied pictures of other Bhairava figures. After this study I doubt very much if any Bhairava figure exists anywhere that can approach this Maruthampatti Bhairava in the excellence of its proportions, the assured and forbidding alertness of its stance, and the superb realism of the hunting dog¹ depicted.

The excellence of the depiction of the Bhairava will beasier appreciated, from my photograph."

¹ Dogs of this type, the pure 'Pariah dog' or countryside herd-dog of India with no trace of exotic blood in its veins, are well known to me. I have known them in remote areas and watched them closely, and watched them hunting pig. The hunting dogs are not different from the herd-dogs of the country-side in any way, being only robust and powerful dogs of that kind. This breed is of far greater antiquity than indigenous hounds (such as the Rajapalayam or Poligar, the Kombai and the Sippipari in the South, the the Muthhol hound in the Deccan and the Rampur hound in the north, and the Banjahra dogs), and naturally it was only comparatively recently within the last 4 centuries, that exotic hounds as such the grey hound and the Saluki, were known in India.

In the depictions of dogs more than about a century old it is always this indigenous 'Pariah' type hunting-dog that is shown: carvings and pictures of 'sight-hounds' make their appearance on our classical stone only about the time of Krishna Deva Raya and subsequently. This Maruthampatti Bhairava' hunting dog is a masterful depiction of the animal—the short prick ears the short-coupled body, the rather straight hocks, and the short rail carried in a gay curve are all authentic and characteristic.

MALAYADIPATTI

Taluk : Kulattur.

Population : 2,971.

Distance from Pudukkottai : 33 Kilometres.

At Malayadipatti there are two cave temples hewn out of the same rock, one dedicated to Siva and the other to Vishnu. Reminiscent of the Tirumayam temples, this pair of twin temples is ascribable to the latter half of the eighth or the early half of the ninth centuries. The Siva temple's walls contain panels with figures in bas-relief of the Saptamatrike group, Ganesa, Virabhadra, Siva, Vishnu and a large and impressive one of Mahisasuramardini spearing the asura. The latter is, unfortunately, much disfigured. The other shrine, with the figure of the reclining Vishnu, has remnants of stucco decoration.

The dvarapalakas in the two shrines are unconventional, looking more like portrait sculptures. The site was visited by M. Krishnan in February, March and April 1975. The dark interior of the Siva cave and an inconveniently positioned nandi image in front of the Saptamatrika frieze posed no ordinary challenge to Krishnan's camera. He writes in a note: "The two pictures of the frieze shown here are prints from the same negative (Numbers 1 and 2) differing only in tonal gradation. This frieze is in a very dark inner hall, on the rock-wall of the original shrine on to which the inner hall has presumably been added, on the lines of a lean-to shed. The figure of Veerabhadra to the left of the frieze (as one looks at it—to the left of the beholder) is badly eroded¹ and it is noticeable that other figures adjoining it in the temple are also badly eroded—apparently, some seam of weakness in the stone has led to this unequal weathering, and perhaps the inner hall was added to protect the carvings from exposure to wind and weather. The Malayadipatti shrine is old, and out of the way. The Saptamatrika frieze here will interest iconographers and those interested in it from religious motives (such as practitioners of

1. The Archaeological Survey of India has, by gravity-grouting of the entire seam-joint percolation of water in the boulder, involving both the cave temples from top of rock, fully plugged the line of percolation and obviated any future damage to the interior carvings..

Kundalini yoga) because it is some 10 centuries old and quite authentic. Note that the order of arrangement of the seven mother-figures follows prescribed rules. Because of the plethora of Siva and Ayyanar temples in Pudukkottai, stone and terracotta depictions of the Saptamatrika figures are not uncommon in the district, and in some of these considerable licence has been indulged in, for example, in the Septamatrika depiction in the Tirugokarnam shrine, the order of arrangement has been arbitrarily altered and an eighth mother-figure, that of a Narasimhi, has been interpolated."

NARTTAMALAI

Taluk : Kulattur

Population : 951

Distance from Pudukkottai : 19 kms.

A group of nine low hills and a village that nestles at their base are known by the name Narttamalai. Legend declares them to be fragments of the Himalayan herb-bearing peak, which fell here when Hanuman flung it back from Lanka, whither he had transported it in order to restore to life the heroes who had fallen in battle. The Narttamalai hills are said to contain many rare medicinal herbs—which fact explains the currency of the story. The Perungalur Sthalapuram derives the name Narttamalai from the sage Narada, and calls it Naradarmalai. The *Manual of the Pudukkottai State* (1944) links it to the word *Nagarattarmalai*, or the hill of the nagarattars or Nattukkottai Chettiars. It was a centre of the ancient south Indian merchant guild—'the Nana-desi 500'—and was a nagaram or a mercantile centre. The Nagarattars of the present day are their lineal descendants. The derivation Nagarattar malai or Nagarattu malai is therefore appropriate.

These hills were in early times the abode of jaina ascetics. The natural cavern at Aluruttimalai, one of the Narttamalai group has traces of 'beds' similar to those at Eladippattam in Sittannavasal, where jaina monks practised austerities. More of such jaina caverns and jaina vestiges are to be found on the southern

flank of Kudagumalai in front of Aluruttimalai on the east across the high road and nearer the railway track. Melamalai with its caverns and caves is in fact, also known as Samanarmalai or the hill of the jainas.

Narttamalai appears to have been an important jaina centre with temples and monasteries as also a mercantile centre or Nagaram as attested by inscriptions. The local merchants were sila-settis according to the inscriptions.

In about the 7th to 9th century Narttamalai was included in the Pallava empire. The Muttaraiyars¹, were, however, in direct control of the administration. The cave temple known as Paliyili Isvaram appears to have been excavated in the time of the Pallava, Nandivarman III (C. 826-849) by a Muttaraiya chief Sattan Paliyili, son of Videlyidugu Muttariyan² as stated in the inscription on this temple dated in the seventh year of the Pallava emperor Nripatungavarman (C. 849-875). This region was apparently been disputed by the Pandyas and Cholas till about the middle of the 9th century when Vijayalaya Chola incorporated it in the Chola empire after defeating the Muttaraiyar. The free standing temple on the Melamalai is named according to a very much later inscription on the rock nearby (and not in the temple) after Vijayalaya. In the region of Raja Raja I (C.985-1014). Narttamalai was called Telungukulakaplapuram after one of the titles of the king. During the last years of the reign of Kulottunga III Narttamalai came under Pandyan rule. Rajendra III probably recovered it, since there is here an inscription of his reign relating to this temple building activities, but very soon it again passed into the hands of the Pandyas.

Narttamalai could have come under the rule of the Madurai Sultans for about 50 years in the 14th century untill the Vijayanagar dynasty, reconquered the south. The only Vijayanagar inscription here, however, is dated A.D. 1431 and is in the reign

¹ The Muttaraiyars ruled sometimes independently, but often in subjugation to the Pallavas or Pandyas.

² Other Muttaraiya chieftains mentioned in inscriptions here are Mallan (?) Viduman otherwise called Venrimadatta ('one flushed with victory'), Tamiladiaraiyan (P.S.I. 11), Sattanpadi Nangodiyaraiyan, and the son of Sattan Paliyili.

of Devaraya II. This mentions a local chief Ambeyaraya Udaiyar, son of Mahamandalesvaran Vira Kumara Tirumallinatha Udaiyar. Narttamalai came later under the direct rule of the Madurai Nayaks Akkal Raja,¹ a Vijayanagar nobleman was persuaded on his way to Rameshwaram to settle in this tract and put down the lawless Visenginattu Kallars. He lived in a fort on the Narttamalai hills. We hear of Akkachi,² a Pallavaraya prince employing a Kallar warrior of the Kachiran sect to slay him and bring here his head. When Akkal Raja was thus killed, his seven wives committed sati by throwing themselves into a pyre prepared near Nochikkanmoi by the side of the Narttamalai hills. The descendants of these Nayak or Raja settlers live in the adjoining place (Uppilikkudi) even today and are called Uppilikkudi Rajas.

The Tondaimans acquired Narttamalai from the Pallavarayas.

Owing to its natural advantages for defence it was for long used as a military station, and traces now exist of fort walls and citadels.

The nine hills here are called 1. Melamalai. 2. Kottaimalai, 3. Kadambarmalai. 4. Paraiyanmalai. 5. Uvaccanmalai. 6. Aluruttimalai. 7. Bommamalai 8. Manmalai, and 9. Ponmalai.

A small rock-cut Siva temple here, is the Paliyili Isvaram, with its sanctum cut out of the rock, measuring 8' x 7'6", and is 6'8" in height. A frieze of bhutaganas dances on its beading above. A cylindrical lingam inside and two dvarapalakas of this temple have been carved out of the same rock. A Pallava inscription on the basement, states that the temple was excavated by one Sattan Palliyili, a Muttaraiyan. Sattan's son built the front mandapam and installed a nandi, while his daughter Paliyili Siriyanganal made a gift of land to the temple. Paliyili is a contemporary of the Pallava Nandivarman III (C 826—849) and the Pandya Sri Vallabha (C. 815—862).

1. Akkal Raja (mentioned in P.S.I. 877) was a contemporary of Raja Raghunatha Tondaiman and Narmana Tondaiman, was probably a descendant of the former chief.

2. Evidently of Mahamangalam or Padakkottai, where there is a tank called Akkachiyanal.



The Madattukovli (Maruthampatti) **Chakravarthi**.

Photo : M. Krishnan



Panel from the Nodungudi ratham (*her*).

Photo : M. Krishnan



Leonine, elephantine and horned yalis—eastern side of Narttamalai Vishnu temple plinth
Yalis and Elephants — Narttamalai.



Yalis and elephants on Narttamalai plinth



Dynamic frieze of elephants and yalis—western side of Narttamalai plinth



Elephants galumphing — eastern side of Narittamalai piloth



Wild elephants climbing ashore after swimming across the Periyar



Elephant frieze at Somanathpur

Photos : M. Krishnan

The Samanar Kudagu also called Padinenbhumi Vinnagaram is another rock-cut cave temple north of the Paliyili Isvaram. This consists of a rectangular sanctuary, with an ardhmandapam supported by massive but rude pillars supporting bracketed capitals. The sanctum is empty, but the ardhmandapam houses twelve identical figures of Vishnu each holding in its upper arms the traditional discus and conch. These images of time to the original excavation of the cave of jaina creed have been held to represent the twelve common names of Vishnu. In front of this cave temple is a remarkable structured stone plinth with figures of lions, elephants and yalis carved above the beading.¹



1. M. Krishnan, author of the photographs of yalis published here, writes in a note : "The yali is a polymorphic legendary creature of the South, of superlative power. It has been loosely described by early writers on our art (like Havel and Vincent Smith) as a species of griffin which it is not, for no part of an eagle ever enters into its much-varied composition. The home-range of the yali may be said to be more or less limited to the Deccan and the south, but it has a wide territory, and is to be found in Karnataka, Andhra Pradesh and Tamil Nadu, and even in Kerala. As per the folklore traditions of Tamil Nadu, (as distinct from its sculpture) the yali is a terrible beast and preys on lions and elephants, whereas the lion (unknown in Tamil Nadu or the south as a wild animal) preys only on elephants. The yali has never been pitted against the tiger in our folklore.

It has been said that the yali is basically a lion-elephant combination ; this is not true. It is often shown with a cornucopia-like horn and the ears of a ruminant, and a face like a heavy-jawed mastiff. It may be said that yalis make their appearance quite early in our art, from before the Chola period (this is merely a convenient indication of period : it should be realised that the unknown master-carvers who built up our heritage of classical stone were neither Cholas nor Rayas nor Pallavas, but were professionals employed by shrines and kings, and usually called stone-masons). Yalis have been depicted, with much verve and vigour, in Vijayanagar and post Vijayanagar (Nayak) sculpture, but perhaps they attain their most masterful expression in Chola period sculpture, and the yalis at the platform outside the Vishnu Shrine at Narttamalai and in friezes around the Moovarkovil (Kodumbalur) shrines are among the finest in existence.

This temple was originally a jaina temple, but was converted into a Vishnu temple in the 12th year (A.D.1228) of the reign of Maravarman Sundara PandyaI. (P.S.I.281).¹

It was called Tirumerkovil or Meltali and Padinenbhumi Vin-nagaram after the eighteen regions or seats of the Corporation of Ainnurruvar.²

The Vijayala Cholisvaram opposite to the Padinenbhumi Vin-nagaram is a free-standing temple dedicated to Siva. It is most beautifully appointed, at a flat on the eastern slope of the hill. The main entrance, which faces the west, is guarded by a pair or two-armed dvarapalakas, one arm resting on a club and the other

1. From an unpublished inscription on the moulded basement dated in the 45th year of Kulottunga I (about A.D. 1115), Messrs. K. Venkatarangam Raju and S.R. Balasubramanyam conclude that this temple was converted into a Vishnu shrine "at least very close to this period, if not actually at the date of the inscription". (*Journal of Oriental Research* Vol. VIII pp. 25-26). This inscription registers a sale of land by the Nagarattar to Devan Periyar also called Mudikonda Chola Telungaiyaraian for the conduct of daily worship to the God Karumanikka Alvar of Tirumerkovil. Messrs. Raju and Balasubramanyam have added the following note—"....The position of the inscription is so low and the gaps so narrow that it would not have been possible for any stone-mason to engrave it after the construction of the basement. Hence it has to be inferred that the inscription was engraved prior to the fitting up of the blocks into the basements". P.S.I. 281 of the reign of Maravarman Sundara Pandya I clearly mentions that 'Western temple' was consecrated and in it were installed the idol of Vishnu and those of his consorts (திரு மேற்கோவிலாக உகந்தருளப் பண்ணின பதினென்புமி விண்ணகர மெப்பெருமானையும் பிராட்டியாரையும் உகந்தருளப் பண்ணி). From this we may conjecture that there was a temple to Karumanikka Perumal, then known as the Tirumerkovil or Western temple, in the reign of Kulottunga I, that it must have subsequently fallen into ruins, and that about a century later, in the reign of Maravarman Sundara Pandya I the Jain cave temple was converted into Tirumerkovil, and the idols of Vishnu and his Devis were installed in it. These idols are now missing. The materials of the original Vishnu temple must have been used for the mahamandapam in front of the cave-temple, as otherwise it is difficult to explain the position of the stones bearing the Chola inscription as stated in the note referred to above. The twelve figures of Vishnu must have been cut out of the rock when the cave temple became a Vishnu shrine. P.S.I. 281 refers to a gift of land to the temple by the Nagarattars and the appointment of an officer to collect a special tax on every marriage celebrated and to utilise it for temple repairs.

2. The Ainnurruvar had many sub-divisions coming from the '1000 districts of the four quarters, the 18 towns (Padinenbumi or Padinenvisayam), etc.' Vinnagaram means a temple to Vishnu.

held out, and with legs crossed. The front covered mandapam stands on six pillars that are cubical at the extremities but octagonal in the middle. The single arched cornice is decorated with figures of human heads and animals. On the roof's parapet wall are figures of nymphs. The sanctum is circular. Around its circular wall is a narrow circumambulatory passage between it and the outer square wall. The hollow superstructure has four storeys, with separating cornice. The walls of the first and third storeys are circular, while the second has niches with figures. Among the figures in the niches, those of Umamaheswara and Vinadhara Daksinamurti¹ are notable. Six sub-shrines in various stages of ruin are to be seen round the central shrine.

Very faint traces of paintings can be seen inside on the ardhamandapam's walls. A Bhairava with eight arms is seen on the north wall, and what is probably Durga, on the south. These paintings have been held to be 'modern' not earlier than the 17th century, in the *Manual of the Pudukkottai State* (1944).

An inscription of the 12th year of Maravarman Sundara Pandya of the 13th century on the rock a few hundred feet to the north and unconnected with the temple refers to a Vijayalaya Cholisvaram and possibly this came under that appellation later. An inscription under one of the dvarapalakas-an *in situ* evidence-says that this temple, build by Sembudi,² was repaired by Mallan Viduman also called Tennavan Tamiladi Araiyan³ when the original temple was damaged by thunder lighting and rain. These repairs were executed before the reign of Vijayalaya, the founder of the line of Cholas, if the attribution of the name to the temple is accepted beyond doubt. The foundation inscription inscribed below the niche of the dvarapala of the northern side is not dated in the regnal year of any king—Chola, Pandya or Pallava. It mentions that Sattanbudi Ilango Adi Araiya was the original

1. The Vin in the hands of this figure has a rectangular 'sound box'.

2. The correct reading of the name in the inscription is 'Sattanbudi'.

3. V.S.L. II on the rock north of Arumathikulam, the text is about of Melamalai, records that this Mallan Viduman constructed the Shrine of this ash.

builder of the all-stone temple (Karrall) and after it was damaged by rain or lightning stroke, one Mallan Viduman repaired or renovated it. The Ilango Adi Araiyan has been equated with Videla-vidugu Mullavaiyar from other inscriptions. Mallan Viduman has apparent kinship (brother?) with Mallan Anantan alias Minavan Tamiladi-araiapani husband of Paliyili Sinyanangai, who was the grand daughter of Videla-vidugu Muttaraiyan, and she was the donor to the cave shrine founded by her grand father and added to structurally by her father. Her gift to the already existing shrine and ardhmandapam (the inscription is on the plinth of the ardhmandapam) is dated in the 7th year of Pallava Nripatunga (866 A.D.). This Mallan Viduman alias Tennavan Tamiladi araiyan is also the maker of the stone sluice of the Animadaeri tank below the Melamalai rock right in front (east) of the Vijayalaya Cholisvaram. The script is archaic. Evidently the temple formed by a Muttaraiyan, who was independent for sometime before the 7th year of Nripatunga (866 A.D.) when his inscription in this region of the south appears for the first time. The temple can therefore be dated round about A.D. 850 and its original foundation is definitely pre-Vijayalaya in age. The restored or renovated temple might have got the name of the founder of the Chola line-Vijayalaya whose advent followed closely. Instances are not wanting (in fact there are many such) when the older or original name of a temple is altered during later reigns and given new names. Stylistic considerations too would point to such a date. It is to be remembered here that the first and only mention of the name Vijayala Cholisvaram is in a very much later Pandya inscription and that too not on the structure but on the rock surface far removed from it and in fact could have referred to any one of the temples extant at that time in that place.

A natural cavern at a distance south of the cave-temple, contains a tomb of a Muslim Saint. On the rock to the north of the cave-temple is an inscription (P.S.I. 1112) which records the gift of a mortar by a certain chieftain named Vaippurudaiyan Toludan.

The Talavarasingam (Talaivaruvisingam) and Talumbusunai are two tarns on this hill. In the former there is a submerged cave temple with a lingam cut out of the same rock named Jvaraharesvara or the 'destroyer of fever'. According to an inscription

dated A.D. 1857, Ramachandra Tondaiman had the water baled out and, in the company of his junior Rani and his guru Sivarama Svami, worshipped this lingam. Talumbusunai is so called because it is always brimming. A quantity of weeds and grass on its surface form what looks like a floating mat.

On Kottaimalai or 'Fort hill' is a ruined fort of granite boulders.

The adjacent hill Kadambarmalai, is named after the temple of Tirukadambur Udaya Nayanar situated at its base. The garbhagraham and ardhmandapam here resemble in some respects those of Balasubramanya temple at Kannanur.

The earliest inscription in the Kadambar kovil is of Raja Raja II. The original temple may, therefore, be assigned to the late tenth century, but the extant structure is a renovation on the same plan of the times of Kulottunga Chola I.

Most of the Narttamalai inscriptions are on the Kadambur temple mandapam walls and the rock adjoining. Eleven of these are Chola, and ten Pandya. These relate to gifts and conveyance of land by nagarattars, the instituting of festivals and sandhis or worships, and rewards for services to the temple.

The Siva temple to the east of Kadambarkovil, or Nagarivaram was built in the 12th year (about A.D. 1228) of the reign of Maravarman Sundara Pandya I (P.S.I. 283).

Traces of a fort are seen on the Kadambar hill and a wall 2,000 feet in length, 13' in height and 10' in width, which must have once been originally fortified. Two tams are to be found on this group of hills also.

On Paraiyanmalai stood once the barracks of the 'paraiya' watchers (or drummers—*Uvaccans*) of the Kottaimalai.

On the Uvaccanmalai were situated the quarters of the Uvaccans or temple drummers. In an inscription of the reign of Raja Raja I (A.D. 1013), there is a reference to their services.

Aluruttimalai, or 'Man-rolling' hill, is an elongated mass of rock with continuous steep incline on one side, and a sheer drop of over a hundred feet high on the other. A natural cave

on the northern hill of the Aluruttimalai, popularly, called the Ammachatram hill, has four polished stone beds similar to those at Eladippattom in Sittannavasal. These indicate that the cave was a jaina retreat. A broken Tirthankara is to be seen inside. On the rock overhanging the cave are reliefs of two Tirthankaras with the triple umbrellas. A damaged inscription calls this hill Tirumanamalai or Tiruppallimalai, or the hill with a palli or Jain temple. It also mentions two Jain acaryas—Dharmadeva and his guru Kanakachandra Pandita.

To the south of the branch-road to this village taking off from the Pudukkottai—Tiruchirappalli road, is the Bomma-malai on which there was a monastery. It was known as 'ten' (south) Tiruppallimalai.

The other two hills Manmalai (mud hill) and Ponmalai (gold hill) are of little interest.

Jambukesvaram or Tiruvanaikkavisvaram is a Siva temple in the middle of the village.

The Mariamman temple here is one of the important temples of the district. The car festival in March-April attracts a large concourse of pilgrims and sight-seers from far and near. The mouth-look, sharp needles jabbed into the body and other modes of self-torture form some of the vows still performed here on this occasion. This annual festival is preceded by what is known as Puccoriyal, or the covering of the goddess with flowers, for which flowers come to the temple from all over the district. The two mandapams of this temple and the *ther* are said to be the gift of one Nallammal of Vriddhachalam. This pious lady lies buried about a hundred yards from the temple, in a grave that she is herself said to have dug when alive.

To the south-east of the village is a reserved jungle.

NEDUNGUDI

Taluk Tirumayam.

Population 1,658

Distance from Pudukkottai .. 35 Kms.

Nedungudi is a little town of interest on account of a temple it contains, dedicated to Siva in his Kailasanatha aspect. Built on a mound of earth which is just large enough for the temple car to be dragged on it, the temple acquires an importance at festival times. M. Krishnan who visited the temple, believed to be Pandya, in April 1975 writes¹: "The temple-car (chariot) best known to the West, and perhaps even in India, is the famous *rath*² of Jagannatha Puri in Orissa. It is from this huge *rath* and the imagined massacre of large numbers of devotees immolating themselves beneath its ponderous wheels that the English word 'juggernaut', connoting something relentless in its destructive power, came into being. Puri Jagannatha's *rath* is made of *phasi* wood (*Anogeissus acuminata*) and rebuilt every two or three years--the timber is floated down the Mahanadi from the Satkosia gorge (on the banks of which the tree grows wild) and at Puri it is shaped and built into the famous *rath*."

That is not the way the *ther* of temples in Tamil Nadu is built. It is a much more elaborate and artistic temple-car though it may be comparatively small, and is built to last and be highly decorative and depictive. The art of wood-carving in the south has never found finer expression anywhere than in the *ther* and in the great entrance-doors of temples. The wood used for fine carving should, ideally, be close and even in texture and have no strong grain, so that it can be cut in any plane desired; there is no dearth of such timbers in the forests of the south, but they are not used for the *ther*. Nor is teak, native to the soil and of versatile durability even in exposed situations, used much, though it is soft enough and close-textured enough to lend itself to being carved and whittled. By established tradition only certain timbers are used for the *ther*,

¹ In a note for the Pudukkottai District Gazetteer.

² *Ther* is the Tamil word for the *rath* of Hindi and allied languages, an *ratha* of Sanskrit.

and their choice depends on the part of the *caarlot* for which they are to be used. But for the intricately carved panels of the upwardly enlarging part upto deck of the *ther*, closely joined together to make a strong, integrated Unit, the woods used are usually the *iluppai* (southern mohwa, *Bassia* sp.) and *pila* (*Artocarpus* sp. jack). Neither is a fine-textured wood, being coarse-grained, and both are somewhat recalcitrant and need keen chisels and till for being out and carved precisely—but they have a virtue that not even teak has, they have a strong latex (the white, rubbery juice in their green-wood) that serves, when their timber is cut, dried and seasoned, to hold the wood-fibres together in its hard-rubber grip when it dries—this latex is a most powerful adhesive, and bird-lime is made from the latex of both these trees. The result of this is that however delicate and protuberant a detail of the carving may be, even when it is carved across the grain, it does not chip off easily. That is why these woods are used for these carving: which are some-times in high relief. Further they are easier work and carve when fresh.

The art of carving the panels of *ther* is now almost lost to us, the few practitioners that remain having nothing like the skill and the virtuosity of their fathers and grand-fathers. This is only to be expected, for there is little scope for such skill today as an assured profession. All the more reason why the best examples of the work of the master-carvers of two generations ago should be carefully preserved. Wood, even *iluppai* or jack, is perishable when exposed for years to wind and weather, as the *ther* usually is.

One of the finest examples of a superbly-carved *ther* I have seen anywhere is the *ther* of the Nedungudi Siva temple."

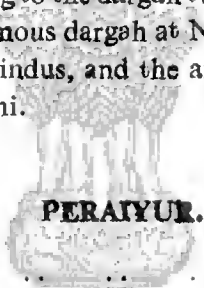
PALLIVASAL

Taluk	Tirumayam.
Population	394
Distance from Pudukkottai ..	30 Kms.

The full name of the village is Kattubava Pallivasal, or the tomb of the 'forest father'. The name is explained by the legend that in the seventeenth century a muslim saint of the name Sayyed

Fakhruddin Auliya, a native of Arabia belonging to the title of Quiresh, halted near Tirumayam in the course of his wanderings in South India. One day, on seeing a group of girls being assaulted in the adjacent forest by a gang of robbers, he intervened and saved their honour. Thus the name 'forest father'.

The present shrine which faces south is the gift of Muhammad Ali Walajah, the Nawab of the Carnatic; and to the right of it is a mosque. All round the dargah are cloistered halls. Over the tomb is a gummat or dome surrounded by minarets. The Tonkuman of Pudukkottai, the Nawabs of Trichinopoly and the Setupatis of Ramnad made rich endowments to the shrine. An inscription on a slab in front of the tomb, dated in the Tamil Year Datu (1696 A.D.) records an order of Ranasingu Tevar, son of Katta Raghunatha Tevar, better known as Kilavan Setupati, to one of his officers granting to the dargah two tanks with the surrounding fields. Like the famous dargah at Nagore, Pallivasal is visited both by Muslims and Hindus, and the annual urs is celebrated in the month of Rabhisani.



Taluk ..	..	Tirumayam.
Population ..	..	328
Distance from Pudukkottai ..	..	15 Kms.

Peraiyur is a palmyra-shaded village on the south bank of the Vellaru. Men of the Isai Vellala or Melakar community in the village fashion hand-fans¹ out of the palm leaves.

Peraiyur contains a temple of considerable interest. Dedicated to Siva in his Naganathaswami (lord of the snake) aspect, the shrine faces an oval tarn that is filled seasonally by rainwater. Along the edge of this water is a plinth on which sit snake-stones or nagakkals, row upon row. Each of these stones, one to two feet high, depicts, a coiled five-hooded cobra. Some of them show the common

¹ These can be made by a single artisan at the rate of about 25 to 30 every day. A medium-sized Peraiyur fan in the Pudukkottai shandy—its chief market—costs the buyer 10 paise.

motif of two inter-twined snakes, one hood facing the other. These have been placed at the temple over the centuries as votive offerings and installed every time with suitable rites in the *gapratishtha* (snake-installation) ceremony. The object underlying the installation is that this will remove barrenness in women.

So large and overwhelming an assembly of snake-sculpture is met with rarely.

A tall stone Nataraja dances at the entrance to the main shrine

From the tarn a musical sound is said occasionally to rise. The warblings, reported to resemble the sound of both stringed and percussion instruments, are held by the faithful to be the accompaniment of an invisible worship of Siva by Adishesha or the serpent-king. The musical emanations are heard for a day or two when the receding waters of the pond touch a particular level. At its loudest, the music is said to be audible even outside the temple walls. That this tradition is not mere superstitious imagining but is, in fact, grounded in a plausible physical phenomenon can be inferred from the paragraphs on 'singing sands' in Lord Curzon's *Tales of Travel*.¹ The principle involves the passage of sands (as also presumably air and water) through cavities in the earth producing, in the process, vibrations or waves of melodic sound. Curzon, had he known of Peraiyur, would have liked to include the acoustic property of its tarn among the cases of 'natural music' described by him in that work.

The temple's earliest inscription relates to the reign of Rajendra Chola (1012—44 A.D.) There are other Chola and Pandya inscriptions belonging to the thirteenth century. The oldest extant portion of the temple (the western gopuram behind the sanctum) is, according to K. R. Venkatarama Ayyar (*A Manual of Pudukkottai State*, 1944), in the 10th Century Chola style. Its niches hold figures of Dakshinamurti and Brahma. There is in the precincts a subsidiary shrine for the goddess Brihadamba, said to belong to the close of the fifteenth or early sixteenth century, and is in the Vijayanagar architectural style.

1. For drawing our attention to the Curzonian parallels of 'natural music', we are indebted to P. M. Subramanian, Pudukkottai..



Photo : M. Krishnan.

A panel from the Natusgudi ratham (chariot).



Snake stones and tarn at Peraiyur temple.

Photo : R. Whitaker



सत्यमेव जयते

The temple bears signs of several renovations, the last of which series took place in the reign of Ramachandra Tondaiman (1834—1886). Much of the brickwork on the vimanam is recent and not without a touch of the erotic.

A curious temple, this. It can be studied with profit by anyone researching¹ on the naga in Hindu art and ritual.

PERUNGALUR

Taluk Alangudi.

Population 3,395.

Distance from Pudukkottai .. 18 kms.

One of the centres for iron-ore smelting in early times, Perungalur is a village on the Pudukkottai—Thanjavur road. Situated close to the Agniaru or the Perungalararu, it has also known an active agricultural tradition. Perungalur was, apparently, one of the early Vellala settlements in the கௌண்டி. It belonged alternately to the Setupatis and the rajas of Thanjavur before being finally integrated in the Tondaiman's country.

A curious temple is to be seen in Perungalur. Dedicated to Aiyanar, locally called Malayamarungar, it enjoys a considerable reputation in the area. The deity is believed locally to have come to Perungalur from Malabar and settled in the village temple. The temple priests are, by tradition, harijans. They incant the prayers and distribute the prasadam to pilgrims who consist of men from all castes including, significantly, brahmins.

Perungalur has been written about by the Tamil writer Akilon in his best-known novel *Paavai Vilakku*² (1957). The town Kannapuram in the novel stands for Pudukkottai ; Pudupatti for Perungalur.

1. For an excellent account of serpent worship the reader is referred to an article (titled 'The Naga in Art and Lore' by K. Bharath Iyer in the *Times of India Annual* no. 0). Iyer states therein : "The Naga in its developed iconography is a mythical being based on the zoomorphic creature with its real and assumed qualities idealized. It is typical of the age-old and universal phenomenon of the animal, at first venerated becoming a divinity and then denigrated to a secondary position with the ascendancy of anthropomorphic deities and new creeds".

² Akilon was born in Perungalur on 27th June 1922.

There is a fairly large old Siva temple in the place called the Vamsoddhavakanatha temple. Vamshoddhavaka is a synonym of Kulothunga.

PONPETI.

Taluk : Arantangi

Buddhamitra of the 11th Century A.D., a prince of *Ponpeti* village composed the (*Vira-Sozhiyam*) at the request of the Chola King Virarajendra, who ruled between the years 1062 and 1070, A.D. before Kulottunga-I ascended the throne. Venkayya identifies *Ponpeti* with the present *Ponpeti*.

Vira-Sozhiyam is a work on Tamil grammar on ultra-sanskritic lines. This has a commentary by perundevanar. This mentions the Chola monarch Virarajendra as a great scholar. Prof. Nilakanta Sastri holds that this work was composed in the reign of Virarajendra. In its *Payiram* or preface, the commentary cites the *Prasisti* or historical introduction found in the inscriptions of this King and also the battles of Koppam, Kudalsangamam, etc. Buddhamitra is therein called the ruler of Ponpeti, with an implication that he got the fief from the Chola ruler. The *Vira-Sozhiyam* is written in *Kalitturai* metre and is planned on the basis of a synthesis between Tamil and Sanskrit systems of grammar and rhetoric; and comprises the usual five sections. *Sandhi* (ezhuthu). *Sol*, *Porul*, *Yappu*, and *Alankara* (ani). The author's preference for Sanskrit titles is seen in the names of the first and last sections, while the order of the sections show even more clearly the partiality for the Sanskrit System. The work is full of interest to the student of the history of Tamil grammatical theory.

From here, at a distance of five miles to the west, lies a small village by name Karur. There is a beautiful Buddha statue of 2½' high, in the usual *dhyana* pose. It has around it the *prabha* (or halo) which is of the type seen in the *Kuvam* Buddha. K. B. Srinivasan holds¹: "This and other features clearly indicate the late Chola period. This Karur, it is to be noted, is very

¹ f. *Visvan var Story of Buddhism with Special reference to South India*, Government of Madras (1909).

near Ponpeti, the birth place of Buddhmitra, the author of *Vira-Sozhiyam*. The existence of this image in the nearby village, and the reported existence of images of this kind in several other villages in the vicinity and the late Chola style of the image all go to show that this area was flourishing Buddhist centre in Chola times." The efforts of P. R. Srinivasan (former Curator for Archaeology in the Madras Government Museum) who discovered the image in this place, to remove this statue to the Museum, did not materialise, since the villagers themselves started worshipping it along with Hindu deities.

PORPANAICKOTTAI.

Taluk Pudukkottai.

Distance from Pudukkottai .. 6 kms.

Porpanaikkottai ('the gold-palm fort') is four miles from Pudukkottai town. This is no village but a ruin of what once was a large fort. The name is said to be derived from a legendary palmyra tree near the fort which is supposed to have yielded golden fruit. Believed to have been built around the thirteenth century, it had fallen into decay by the first quarter of the sixteenth century. According to the *Statistical Account of Pudukkottai* (1913) the fort had 32 bastions and could accommodate two thousand people. It was a circular fort built with bricks¹ and earth, with a diametre of $1\frac{1}{2}$ miles.

The major part of the fort is now razed to the ground and has given place to farms. But here and there, the ruins can be seen in ellipsis.

No accounts speak of the fort's place in history, of was fought herefrom or kingdoms founded. Porpanaikkottai is a curious uin, silent, intriguing. Ponparappinan (பொன் பரப்பினன்) is he title of a Bana chieftian who ruled these parts (Kudumiyamalai, inscriptions referred to earlier) who was called Viramagadhan and

1. F. R. Hemingway in the *Gazetteer of the Trichinopoly District* (1907) describes the Porpanaikkottai bricks as "large and well-burnt"

Rana (Rajaraj) devan. The name of this Bana fort of Ponparappinan might have very well corrupted from Ponparappinamkottai into Ponponnakkottai and Ponpanaikkottai (meaning ultimately the fort of golden palmyra).

PUDUKKOTTAI.

Taluk	Pudukkottai.
Population	66,384.

Headquarters of the old Pudukkottai State from 1686 to 1948 and of the revenue division by that name from 1948 to 1974, Pudukkottai town is the headquarters of the Pudukkottai district since the 14th of January 1974. It is situated in the centre of the district, and is about 229 miles (366 kilometres) due southwest from Madras.

The town's population has been growing steadily over the decades, as can be seen from the figures below :—

<i>Census year.</i>	<i>Population.</i>	<i>Decade variation.</i>	<i>Percentage of decade variation.</i>
1881	15,384	.. .. .	.. .. .
1891	16,885	+1,501	+9.76
1901	20,347	+3,462	+20.05
1911	26,850	+6,503	+31.96
1921	28,776	+2,675	+10.25
1931	26,101	— 749	— 2.79
1941	34,188	+5,419	+18.81
1951	44,527	+10,339	+30.24
1961	50,488	+5,961	+13.39
1971	66,384	+15,896	+31.48

The only decade when there was a fall in the population is the 1921–1931 span. Six years out of these ten were years of famine when emigration reached high points. Over fifty-five thousand people left their villages in the Pudukkottai State during this decade, of which not a few would actually have come into the town for semi-urban employment. Despite this, the town registered a net decrease in its population, the numbers having left being larger than the influx.

Of the 66,384 inhabitants of the town registered in the 1971 census were 56,287 Hindus, 6,949 Muslims and 1,538 Christians. Thirty belonged to other religious and persuasions. 8.1 per cent of the total belonged to the Scheduled Castes.

Of the total 1971 population of Pudukkottai town, males constituted 51.11 per cent. and females 48.89 per cent. Nearly sixty three per cent (41,698 persons) were literate¹.

Given below is an account of the town's geomorphology based, primarily, on the narrative in K. R. Venkatarama Ayyar's *A Manual of the Pudukkottai State*, Volume II, Part II ; 1944.

The town is situated in the valley of the Vellaru—four miles to the north of that river. It stands on a ridge that slopes gradually towards the south. At a high point on this ridge north of the town is a reservoir from which water is piped to different streets in the town.

Pudukkottai town was originally surrounded by an impenetrable jungle forming a natural defence ; parts of this old wood are still to be seen in what are called the Kasba east 'forests'. These once harboured black buck, spotted deer and wild pig which were hunted exclusively by the former royal family. In former times the approaches to the town were through these jungles along three roads on the north, south and west. On these roads stood gate ways called vadis in Tamil, at distances of three miles, two miles, and half a mile, respectively, from the town. Each of these was under the charge of a commander with a detachment. These outposts are still commemorated by the place-names Machuvadi, Kummandanvadi and Puliyavadi. The town is skirted on the west, along the area known as Tirugokarnam, by low rocks that supply granite.

¹ Tamil Nadu's literate population is 39.56 per cent of its total (urban and rural population (416 lakhs), according to the Census of India, 1971.

Of the founding and early history of the town, there is very little hard evidence. 'Prehistoric'¹ burial sites in Sadaiyapparai west of Tirugokarnam and on either sides of the Tirukkattalai cart-tract indicate that the region of the town, as other parts of this tract, was the home of early man. When and how such a megalithic settlement crystallized into a town (mangalam or nagaram) is not quite clear.

Radhakrishna Aiyar relates² the following story: "Muchukunda Chakravarti"—evidently the Chola king, who had his capital at Tiruvarur in the Tanjore district—in one of his tours through his dominions was so struck with the beauty of the tract to the north of the Vellar that he thought of building a town there. The Rishi Parasara fixed an auspicious hour for commencing operations, and Kalasamangalam, consisting of "nine cities" (blocks), was brought into existence. The King Muchukunda applied for inhabitants to the God Kubera (Plutus of Hindu mythology), who sent him 1,500 families. The story was probably invented after the town had become rich and its merchants were found to be very wealthy." In this account fact and fiction are inextricably mixed.

Historical reconstruction is on somewhat (but only *somewhat*) surer ground when it comes to the early division of the Pudukkottai town area into Kalasamangalam³ and Singamangalam. The former is known to have been the site of the capital of the Pallavarars of Vaittur. "To the west of Kalasamangalam" says K. R. Venkatarama Aiyar in *A Manual of the Pudukkottai State* (1944), "was Singamangalam". It is not quite clear, however, on

¹ 'Pre-historic'—the iron using megalithic phase would strictly speaking come under the late 'proto-historic' and not the 'pre-historic' as understood in modern scientific archaeology where the name 'pre-historic' is given to the earliest stone age phases (Palaeolithic—neolithic), before the advent of metal and its use by man. In fact in South India the megalithic phase extends into and overlaps the early historic phase (period after writing was known in the area).

² *A General History of the Pudukkottai State* (1916), page 69.

³ Epigraph on stone pillar found buried in a field adjoining the Kalasakka two miles east of Pudukkottai Town.

what specific evidence he bases this observation. "Parts of these two mangalams became the eastern and western halves of the modern Pudukkottai town", he adds. How these mangalams were transformed into Pudukkottai town is not clear, nor is it known when exactly the kottai or fort after which Pudukkottai takes its name, was built. It has been inferred¹ that Raghunatha Raya Tondaiman who built up the town in 1686 must have also fortified parts of it within about ten years of his reign. It is probable that fortification was destroyed between 1732 and 1734 by Chanda Sahib or Ananda Row or both during their invasions of the town. This cannot, however, be maintained categorically.

Chanda Sahib destroyed the Tondaiman's palace that is said to have stood at the northern end of the town. After its demolition, a new palace was built at Sivagnanapuram, south east of the town, which the then Raja used as a palace and a hermitage and where, it is believed, the eighteenth century sage and composer Sadasiva Brahmendra came to initiate him.

In 1812 the town was burnt down and rebuilt, at considerable expense, by Raja Vijaya Raghunatha at the instance of the Resident, Major Blackburne. The streets were laid out so as to intersect at right angles with the Raja's palace in the centre. In 1813, the town contained three palaces, six terraced houses, 300 tiled houses and 700 thatched houses, besides 21 tiled and 700 thatched houses at Tiruvappur, and 320 thatched houses at Tirugokernam, both of them suburbs. There were also three chatrams, one kept open only during Dussara in the town near the Pallavan tank, one on the Kundaru, and one at Tirugokarnam.

Even in these early days the town was attractive. Hamilton's *East India Gazetteer* (1820) refers to "its wide, regular, and clean streets intersecting each other at right angles," and to its stuccoed, whitened and tiled houses. Pharaoh's *Gazetteer of Southern India* (1855) speaks of Pudukkottai as "a populous town", and eulogises its "handsome pagoda², its "grand high mosque", its "tanks and wells of excellent water" and the "large and commodious houses in the principal streets, with tiled roofs, several of them being terraced".

¹ See under 'Etymology of the Name' in Chapter I.

² Obviously, the gopuram of the Tirugokarnam temple.

The expansion of the town since its rebuilding in 1812 has been steady and continuous, and received considerable impetus during the administration of Sir Sashiah Sastri (1878-1894). During his tenure Puducheri and other suburbs were built, the streets were relaid, tanks were deepened and cleaned, and many public buildings were constructed.

Roughly speaking, Pudukkottai may be considered as divided into the following blocks:—

The town proper, a densely populated block, consists of wide straight streets running east to west and north to south, and intersecting one another at right angles. In the centre is a 'fort' with thick and high ramparts. Within it at the centre stands what is called the Old Palace, containing a shrine to Dakshinamurthi, a Darbar Hall which was used on State occasions by the former rajahs of Pudukkottai, and the palace stables. State functions and ceremonies, including the Dasara, were conducted here.

Abutting on the inner fort (citadel palace) on its eastern side are the temple of Santanathaswami, and the picturesque little Pallavan (Sivaganga) tank with its central mandapam, flights of steps and substantial parapets.

Out side these run the Rajayidi (Raja's or Main Street), probably the best part of the town. Its southern part is the main bazaar street.

Originally the North Main Street, housed the families of the priests appointed for service at the Dakshinamurti temple within the palace. They were Andaras who wielded much spiritual influence in the palace. The Sirkule and the other principal officers lived in the North and East Main Streets, and for a long time the courts were held in the East Main Street near the Ariyanacchi Ammankoil. Many of the officers were then Marathas, and there are still some Maratha families in these two streets.

Karaitope, an old suburb to the south contains the Malai Idugai site on which in 1807 the widowed queen of Raja Vijaya Raghunatha performed the sati. A temple has been built on the site.

Pichattanpatti is chiefly important for an old bungalow for long used as a Residency by the Political Agents during their visits to the capital. It is more than a century old and is mentioned in Hamilton's *Gazetteer* (1820) which says : "About a mile and a half to the south-west of the capital, Tondaiman has an excellent house built and furnished after the English fashion where every respectable European traveller is sure of meeting with a hospitable reception." The Railway Station is located at Pichattanpatti.

Machuvadi or Ramachandrapuram with Ganesanagar, Gandhi nagar, Martandapuram, Santanathapuram and Lakshmipuram in the south, and Rajagopalapuram near the Railway Station are residential suburbs.

Sandappettai, to the west of the town proper, was and is, as its name implies, the market place. The market which was formerly held on the roadside, has been shifted to an open space to the south of the road where permanent sheds have been erected for the sale of commodities. The market which is held every Friday is the largest in the district.

Tirugokarnam lies at the foot of a rock. Here is the famous temple of Gokarnesa and Brahadamba. The Goddess was the tutelary deity of the former rajas of Pudukkottai who consequently styled themselves 'Sri Brihadambadas' or 'the servants of Sri Brahadamba'. They were ceremonially installed on the gadi and anointed at this shrine. It is in the name of this deity that the coin called the Amman Kasu was struck.

Tiruvappur is another suburb. Near it is the Kavinadkanmoi the largest tank in the district. This suburb was once a centre of silk-weaving. According to the *Statistical Account of Pudukkottai* (1813) there were 30 looms in the place in 1813, and according to Pharaoh's *Gazetteer*, it was an emporium with an "extensive weekly market" and "numerous bazaars in which cloths of various qualities and the best in the province" were sold. The weekly market referred to here was subsequently transferred to Sandappettai. Upto some years ago, the weavers were making kambayams or tartans for the use of Muslims and Burmans ; and the dyers of the place prepared sayavesti (pink dhotis) which had a wide reputation, but at present their craft is moribund.

Kovilpatti is to the north of Tirugokarnam. Originally a straggling hamlet, it was laid out afresh by Sashlah Sastri. According to a legend, the men of this village formerly lived at Bitarai-kombu, which they deserted in a body because the local Palayakar attempted to outrage one of their girls. The girl committed suicide, becoming after death a goddess worshipped in a temple built for her at Kovilpatti. There is also another temple in the place called Malukkankovil, at which a Malukkan or Muslim is worshipped in compliance with his dying request. The *Manual* (1944) states : "His antecedents were by no means such as to render him worthy of canonisation, for he had been in the habit of secretly riding down nightly from Tiruchirappalli to meet his concubine at Tiruvappur. One day he was slain (it is said) at the foot of an icchi (*Ficus tsiela* or *F. Indica*) tree by the God Malaikkaruppar whose repeated warnings to discontinue these clandestine meetings, he had disregarded".

The town proper is connected with all the suburbs by good roads.

The temple at Tirugokarnam is one of the most important temples in the whole district. The linga in the main Shrine—a rock-cut cave temple is massive and cylindrical. The figures of the huge Ganesa on the south wall of the ardhmandapam and of Gangadhareswara on the north wall are typical Pallava—Pandya sculpture. Ganesa is a characteristic of [Pandya-mutharaya] cave temples. On the rockface to the south of the cave are figures of the Saptamatrka, Ganesa and another deity who may be identified as Virabhadra. The mahamandapam and the other mandapams in front of the central rock-cut shrine belong to the Chola and Pandya periods. The shrine of Brihadamba seems to be a very late structure, probably renovated within the last two centuries. The absence of any inscription on its wall bears out this conclusion. The large mandapam in front of the Amman shrine, and the corridor leading into the temple from the street belong to the 'Madurai' style. On the pillars of this mandapam are figures in high relief of chiefs and nobles who have not yet been satisfactorily identified. Within the temple are shrines to Bakulavanesvara, in the form of a lingam, Mangalambika and Dakshinamurthi, and on top of the rock-cut shrine include those of Subrahmanya, Durga, Lakshmi

Saraswathi, Bhairava, Jvaraharesvara or the 'destroyer of fever'. At the base of a Bakula (*Mimusops elengi*) tree within the temple is a small image of Sadasiva Brahmendra.

The principal festivals in this temple are the Dassara, and those in Chitra (April-May) and Adi (July-August).

Adjoining this temple is a smaller one dedicated to Minakshi and Sundaresvara and built in the region of Ramachandra Tondaiman. On the south bund of the Periyakulam tank is a shrine containing figures of the sixteen forms of Ganesa.

At Tiruvappur is the Raja Rajesvaram temple, the earliest inscription in which is dated in the twenty-fourth year of Kulotunga III. It was probably built in the reign of his predecessor Raja Raja II (C. 1146-63). Its architectural features are those of later Chola structures. One peculiarity of the temple is that the garbhagham, ardhmandapam and mahamandapam are of the same period. The temple is not now used for worship and is in ruins.

The Kalyanaprasanna Venkatesa temple first built in the reign of one of the late Sundara Pandyas and the modern temple of Venugopalaswami are the two Vishnu temples at Tiruvappur.

On the confines of Tirugokarnam and Tiruvappur is a Mari amman temple. Among the minor deities at Tirugokarnam, the Karuppar on the Tiruchirappalli road is the most important.

Within the Dakshinamurthi temple in the "Old Palace" is preserved the holy sand on which Sadasiva Brahmendra wrote his instructions to Vijaya Raghunatha Raya. The Santhanathasvami temple is next in importance to the Brahadamba temple. The chief festival of this temple is held in Ani (June-July). There are three Vishnu temples within the town proper—those of Varadaraja Venkatesa and Vitoba.

The Bhuvaneswari temple at Pudukkottai is a great attraction to pilgrims. It is a relatively recent foundation and has an interesting origin. In the early years of the present century there was a

judge in Travancore, very conscientious and just. He was trying a case of murder ; the evidence seemed conclusively to point to the guilt of the accused; however, the Judge had uneasy doubts and he could not bring himself to convict. In his dilemma, he decided to lay down his office. He sought the company of Vedic Scholars, took to reading sacred literature, renounced the world, became an *avadhuta* and roamed from place to place. In the course of his wanderings he came to Pudukkottai, where he cast anchor and came to be known as Judge Swami. In a few years he died and was buried in a bit of vacant land, belonging to the Government near the cremation ground. Years passed and a disciple of his came to Pudukkottai wishing to locate the place where his *guru* had been buried. He was an *avadhuta* too, and clad only in his skin, indifferent to food and given to contemplation. To see him and be near him, it was said, was to feel serene. He pottered about the place of burial, of which he had only the vague indications. He succeeded in locating it and, at his instance, a few pious people agreed to acquire the ground which had since passed into private possession. -and to arrange for ritual worship. A modest shrine was put up, arrangements were made to burn an oil lamp every evening and offer worship. That was in 1936.



यथागतं ज्ञानं

Sixteen years afterwards a disciple of the *avadhuta*, Sri Santhanandaswami, a pious ascetic himself came to Pudukkottai, established himself at the shrine and proceeded to instal an image of the goddess Bhuvaneswari in a temple where she could be worshipped according to edic injunction. Money flowed in and an airy spacious shrine was built. Subsidiary shrines to Ganesa, Subramania and Dattatreya were put up. Every year, in the month of Vaikasi, (April-May) elaborate worship for a number of days is conducted. Scholarly priests perform *homa* at which gallons of ghee are fed into the flames. Huge throngs of worshippers gather to witness the worship which begins before dawn and lasts with brief intervals till near midnight. Religious discourses by eminent Vedic scholars are held almost every evening. Arrangements for feeding visitors are made on a large scale. The worship is most impressive, all according to Vedic practice,

Minor shrines are those dedicated to Hanuman and the goddess of which there are three, Arlyanachi Amman, Manonmani Amman, Kamakshi Amman, and Sasta Porpanai Munisvara, Tadikonda Aiyandar and Singamuttu Aiyandar.

There are two mosques, one in the town and the other in Tiruvappur. The town mosque is about a hundred and fifty years old, and is ascribed to one Mandra, who is also credited with having built same mandapams at pallivasal in the Tirumayam Taluk.

The Darga of Hazrat Syed Shah Parhezi Auliya is held in great veneration by the Muslims of the town. Auliya, a prince of chief tain of Yemen in Arabia, renounced the world and wandered about the countries of south-west Asia and India and at last settled in Pudukkottai in the first half of the eighteenth century. Many miracles were attributed to him. His sanctity attracted the notice of the Tondaiman who held him in high esteem and had a tomb raised in his honour after his death. It is believed that his nephew and disciple also lies buried by the side of the Auliya.

The tomb to the north of the Nainari tank is that of Jatcha Bibi, a Muslim lady who led an ascetic life.

The Church of the Sacred Heart of Jesus and of the Immaculate Heart of Mary, an elegant and spacious edifice in the gothic style, east of Martandapuram is the principal church of the Pudukkottai Catholic parish. The foundation stone was laid in January 1908, the nave was completed in April 1911 and it became the parish church in 1922. The chapel answers to the following description contained in the March-April 1975 issue of a journal printed in Dublin, called *Ireland*: "The most striking building in any Irish village is generally the church (or churches, since in most villages there are at least two), stone built, its spire dominating the surrounding country side. The earliest of these are the 'spiky little churches of dedicated Gothic', which began to be put up as early as the late eighteenth century but continued well into the nineteenth. One jaundiced traveller said of the Cathedral at Tuam (Dominic Madden, completed about 1837) that 'its multitude of little spires spiking up into the air, put me in mind of a centipede or

scorpion, thrown on its back and clawing at the sky'. In fact many of these early churches are charming in an angular, perpendicular way, and some have fine carved wood or plaster decoration in side."

The Protestant church at the north end of the town is a simple and austere lime-washed building. It was built in 1905 and consecrated in 1906. The pulpit's stained glass back drop is quietly impressive. The churchyard here contains, among others, the tombstone of the former Administrator and Diwan of Pudukkottai, Sir Alexander Loftus Tottenham, who died in the town on 13th December 1946, after a service of nearly fifty years in India, twelve of which were spent in Pudukkottai. The flat marble slab bears the words: "Write me as one that loves his fellowmen"¹.

The two most impressive recent structures in the town are the 'Public Office' buildings and the 'New Palace.' The former consists of a wide two-storied structure of exposed brick, pointed neatly with arched gothic windows and spiral staircases. The building which in the days of the Darbar housed the offices of the Diwan, the Darbar Office and the Chief Court, is now occupied by the office of the revenue divisional officer, Pudukkottai, and the civil courts. In front of the building stands a bronze statue of the late Raja Martanda Bhairva Tondaiman, and a pillar unveiled in 1975 by Dr. M. Karunanidhi, Chief Minister of Tamil Nadu, to mark the formation of the district. The 'New Palace', which was designed and built by the late Nilakanta Sastri, Special Engineer for the palace construction and later State Engineer under the Darbar, was occupied in 1930 by the last Raja of Pudukkottai, Thiru Rajagopala Tondaiman. It now houses the offices of the Collector of Pudukkottai, having been acquired by Government from the last Raja in 1974. Its handsome appearance with well-dressed stone walls, Moorish cupolas, and large grounds would make it a building of distinction anywhere.

1. The line is from Leigh Hunt's *Abou Ben Adhem* (q.v.) Adhem, in this work, sees a vision of an angel writing in a book of gold the names of those who love the Lord. He prays that he may be written down as one who loves his fellowmen. The next night the angel returns and Abou Ben Adhem's name then heads the list. The choice of this quotation by Tottenham, a versatile and dedicated civil servant but no man of religion in the conventional sense, is significant.

Other buildings in the exposed-brick and neatly pointed style of the Public Offices are the residence of the Collector (formerly of the Administrators) and the Raja's College. The most significant contemporary structure is the building of the Government Arts College for Women,

SITTANNAVASAL

Taluk—Kulattur.

Population—981.

Distance from Pudukkottai—16 Kms.

An otherwise inconspicuous hamlet of the village Annavasal, Sittannavasal¹ contains an oval-shaped rock—a distension of ancient granite on which age and weather have opened clefts. Megalithic burial sites near it testify to the area around the hillock having been inhabited by iron-age man.

Later, in the era immediately preceding the birth of Christ when man here had progressed far from hunting to sheep-rearing and agriculture, the hill itself was explored by men seeking a retreat—spiritual as well as physical. These men, who belonged to the order of Jainas, let themselves into the widest fissure on the hill (on the eastern summit), chiselled bed-like spaces on its floor to practise austerities and to meditate on the verities taught to them by the creed of Mahavira. The venue of their tapas can be seen yet on one side of the hill, with their names etched in the ancient script, Asokan-Brahmi.² Later still on the western side of the hill a cave temple was cut. Sculptures were carved on its wall, and paintings laid on the inner surfaces of the cave. The men working on the site would scarce have realised that they were fashioning one of the outstanding monuments of South India—the Sittannavasal cave-temple. The name of this village has lent itself to some

1. The name is also spelt Chittannavasal. In this name the 'a' in 'vasal' is long, an 'aa' as in 'rather'. The 'S' at the commencement does not have the sound of 's' as known to English phonetics, but the sound more properly transliterated by the symbol *Ṣ*, with a distant suspicion of the 'ch' sound.

2. The Asokan-Brahmi here is of the southern variety now called Tamil-Brahmi. This epigraph is followed by later inscriptions in old Tamil and an archaic script of the 7th century A.D. and later ones attesting to the fact of its continued occupation by the Jaina monks.

interesting interpretations. T. N. Ramachandran, the late Joint Director-General of Archaeology has observed: "The current Tamil equivalent of this name is Sirrannal-vayil, as it is found in the *iruttandagam* of Appar (*Periyapuranam*). It means the abode of great men, or Siddhas or arhats",²

The third-second century B.C. Tamil Brahmi inscriptions in the Eladippattam cavern says that the abode was made for one Kavidi Iten by the Ilaiyar of Chitu-po-sil (சி-து-பேரகில்), thereby suggesting the name Chittupochil for the place.

1. 'Cave temple and Paintings of Sittannavasal', *Lalit Kala* (Number 9), April 1961. Also see K.R. Srinivasan—"South Indian Paintings—Sittannavasal" in *Proceedings of the Indian History Congress, Madras Session, 1944*; Suresh Pillai—"Asian Travels," January 1974.

2. Other explanations of the name's derivation are:

(a) This hill, once a part of a suburb of Annalvaayil, (அண்ணல் வாயில்) could have come to be called Chirannal-vaayil (Chiru Annal Vaayil) meaning the 'smaller Annalvaayil'.

(b) Since Siddhar (great men) lived here, it could have become Siddhar-vaayil (vaayil=vasal), literally meaning "gateway" but indicating any form of human activity) and then got corrupted in popular speech to Sittannavasal.

(c) The name could be a derivation from Siddhaanaam—Vaasaah, becoming siddhannavaasah and then Sittannavasal.

(d) The name Annavasal may have been given to this place (both to the larger village Annavasal and to the excavated rock-dwellings of Sittannavasal) because formerly there was, probably, an anna-daana choultry (free food kitchen) there. Words such as 'anna-daanam' meaning the gift of food and 'anna-saalai' meaning the place where food was provided free, appear to bear this out.

(e) It could also be that an anna-vaasal where free food was provided and where Siddhar lived came to be known as Siddhar-annavasal and was in the course of time, changed to Sittannavasal. K. R. Srinivasan in a note for the *Pudukkottai District Gazetteer*, supporting the interpretation (a) observes: "The ancient and correct name of the place is Annalvaayil (அண்ணல் வாயில்) as found in the inscriptions of the village and in neighbouring places. The region around it was, in fact, called Annalvaayilkoottram (அண்ணல்வாயில் கூற்றம்), a division as we have in our revenue system today. The numerous inscriptions dating from the tenth century apart, the *Tevaram* (தேவாரம்) of Appar (Sixth *Tirumurai*), seventy-first *Padigam*—*Adalvuttruttandagam* 6961) mentions the place as Kannudalon Nannumidam Annalvaayil (கண்ணுதலோன் நன்னுமிடம் அண்ணல்வாயில்) which forms a still earlier literary reference; It means 'Annalvaayil, the place where Kannudalon (Siva.) resides. "The prosody is such as would not permit one to take Annalvaayil (அண்ணல்வாயில்), as a mislection for Annavaayil (அணாவாயில்). The *Periyapuranam* too has only Annalvaayil (அண்ணல் வாயில்) and not Annavasal (அன்ன வாசல்)."

The Discovery.—Sittannavasal is the best known of Pudukkottai's archaeological sites. It is known primarily for its rock-cut cave-temple and the wall-paintings on portions of its ceiling, walls and pillars. This jaina site was first 'noticed' in S. Radhakrishna Aiyar's *A General History of the Pudukkottai State*¹ (1916). This local historian gives a simple and accurate description of the monument. "Its front hall", he writes, "measures 22 feet 10 inches by

cont.

M. Krishna, on the other hand, disagreeing with the interpretations (a) and (b) says in another note: "The 3-looped 'nn' (*ண்ண*) in the name Annavasal can never change to the 2-looped 'nn' (*ந்ந*) of 'Sittannavsal' (the name has to be spelt identically in English to indicate both the sounds!). This is a metamorphosis unknown to Tamil. While it is true that even many Tamilians cannot pronounce certain letters of the Tamil alphabet properly, and that in their speech the word *vaazhai-pazham* (meaning ripe banana fruit) may become *vaallai-p-pallam* or even *vaaya-p-payam*, even to the most illiterate the distinction between the 3-looped 'nn' sound (*ண்ண*) and the 2-looped 'nn' sound (*ந்ந*) is well known in everyday speech, in words such as *kaan-vali* (*கண்வலி*) meaning sore-eye, *mannangatti* (*மண்ணாங்கட்டி*) meaning a clod of earth, *anna* (*அண்ணா*) meaning one's elder brother and *kinnattu-th-thanneer* (*கிணற்றுத்தண்ணீர்*), meaning water from a well.

How is it then that some savants have advanced the view that (Sitt) Annavasal with the 3-looped 'nn' (*ண்ண*), sound was reduced to (Sitt) Annavasal with the 2-looped 'nn' (*ந்ந*) sound? It is futile seeking the explanation of this strange transmutation in Tamil—Only by a consideration of the limitations of the English alphabet can we know the secret of this. Some quite familiar letter-sounds of Tamil are beyond the reach of English phonetics—the 'l' or 'll' (the doubling of the 'l' makes little difference to the problem) used in English transliterations to indicate the sound of the Tamil letter (as in *குளம்*, "kulam", meaning a pond, and *அளவு* "alavu" meaning measure) and the *ண்ண* sound (the 3-looped 'nn' as in *மணல்* "manna" meaning sand) are good examples of the limitation. Both *அண்ணவாசல்* and *அந்நவாசல்* can only be rendered "Annavasal" in English.

Siddharvayil (also) cannot get corrupted in this manner. It can only change to Siddharvasal or siddavasal—it cannot encompass an "anna" in its middle and turn Sittannannavasal.

1 Appendix: Page xxxiv. Radhakrishna Aiyar was enabled to note the Sittannavasal site as a result of the astute decision taken in 1899 by the then Diwan Regent of Pudukkottai, Sir A. Sashiah Sastri, to catalogue the archaeological wealth of the State. Aiyar was appointed to a special post created for the purpose, with V. S. Vaidyanatha Aiyar as his assistant. Darbar records of the first decade of this century in Pudukkottai have references to the cave-temple and paintings. Facsimiles are available of Sittannavasal inscriptions taken as early as 1916 (Inscriptions of the Pudukkottai State; 1929). F. R. Hemingway in his Gazetteer of the Trichinopoly District (1907) mentions Sittannavasal as "a rock-cut cave which is still visited by Jains from Kumbakonam", but does not describe the cave's contents.

11 feet 6 inches and has two pillars also cut out of the rock and seeming to serve as supports". Aiyar lists the images, two in the front hall facing each other and three in the "square room" behind the middle part of the front hall. The most significant observation of his, however, relates to the paintings in the cave; "On the ceiling of the hall are pictures in water colours¹ of birds seated on lotuses in tanks. These pictures, which are very likely more than ten centuries old, look as fresh as though they were only ten or twenty years old". The impact of Radhakrishna Aiyar's reference to the Sittannavasal temple, its sculpture and murals was, however, inhibited by the comparatively regional character of his book and its readership. He himself is not likely to have realized the full importance of Sittannavasal while describing it. The publication in 1920 of Jouveau-Dubreuil's monograph² on Sittannavasal was, as a result, accorded the status of a 'discovery'. While Aiyar's notice predates the Frenchman's, it is the latter that received attention beyond the educated and ruling circles of the erstwhile State. To Dubreuil and the renowned iconographer Gopinatha Rao who collaborated with him in Sittannavasal during the years 1918 to 1920 must be given the credit of placing Sittannavasal before the archaeological world³. Dubreuil wrote: "La decouverte des fresques du temple Pallava, taille a meme le rocher, a Chittannavasal, est done de grande importance. Ces peintures nous permettent d'mettre les deux propositions

1 Water colours were *not* used. The technique employed is discussed elsewhere.

2 *Bulletin*: 'Fresco Painting at Sittannavasal', (State Press, Pudukkotta 1920). The original, in English, is now virtually impossible to obtain. It is extant however, in its French translation published by Sri Aurobindo Ashram, Pondicherry.

3 In a 1937 letter to S. Paramasivan, Jouveau-Dubreuil wrote: "Archaeological things—if not underground—are well known of herdsmen, shepherds, local scholars, local school masters; but if they are unknown to archaeologists, they are not yet discovered. To discover a thing is to attract on it the attention of the archaeological world by publications praying the importance of the thing. Concerning Sittannavasal, no doubt is possible. The history of the discovery is very clear. The paintings were perfectly unknown to archaeological studies before my publication—State Press, Pudukkottai, 13th November 1920. So the date of discovery is the date of my publication — 13th November 1920. Its history is very logical. It is purely a scientific discovery. Two scholars—Mr. Gopinatha Rao and me—intending to study the Pallava antiquities, discovered the paintings as a result of their researches."

suivantes : (1) Le proeode de la peinture Pallava ressemble a celui des peintures d' Ajanta. (2) Au point de vue artistique, les vestiges que nous avons sont tres remarquables".

The Sittannavasal cave has been cut into the western face of the rock. At the mouth of the cave, a pillared structure is to be seen. This was installed at the instance of Tottenham, the pillars being brought from the ruins of the Kudimiyamalai temple and the roof-slabs from the quarry of adjoining Panangudi¹. The moulded plinth here is original Pandya. Crossing this mukhamandapam one enters the ardhamandapam facade which consists of two pillars cubical at the top and bottom with an octagonal belt between the cubical parts, and two pilasters of the same type one at either end all supporting corbels, an architrave beam and cornice. On the northern and southern ends of the ardhamandapam are niches : the former contains an almost life-size figure in bas of a seated Jaina in meditation under a single umbrella and the latter contains a similarly postured figure of Parsvanatha, the 23rd Tirthankara under the diagnostic canopy of a five-hooded serpent. An inscription² at the bottom of the pillar near the northern figure contains the word 'Tiruvasiriyam'. This has been held to denote that this seated Jain represents an asiriya or acharya. A flight of two steps with gargoyle balustrades leads one to the squarish sanctum sanctorum which contains three similar bas-reliefs of meditating Jaina Tirthankaras in a row. The figures on the extreme left and centre have the triple umbrella over their heads denoting their Tirthankara character, while the one on the right has only a single umbrella, and represents perhaps an acharya or chakravarti.

The rock-cut has been traditionally ascribed to the Pallava era. Jouveau-Dubreuil announced³ quite categorically that the Jaina cave temple at Sittannavasal was excavated by contemporary co-religionist friends of the Pallava Mahendravarman I before his conversion to Saivism by the Tamil saint, Appar.

¹ Information furnished to the Editor Gazetteer, Madras by K. R. Srinivasan, former Curator of the State Museum, Pudukkottai, and Special Officer, Temple Survey, Archaeological Survey of India, Madras, later Deputy Director-General of Archaeology, New Delhi.

² See K. R. Srinivasan, *South Indian Paintings—A Note on Sittannavasal Paintings* (Proceedings Indian History Congress 1944 and note by P. R. Srinivasan, in *Lalit Kala*, 1961).

³ 'Pallava Paintings' *Indian Antiquary*; 1923.

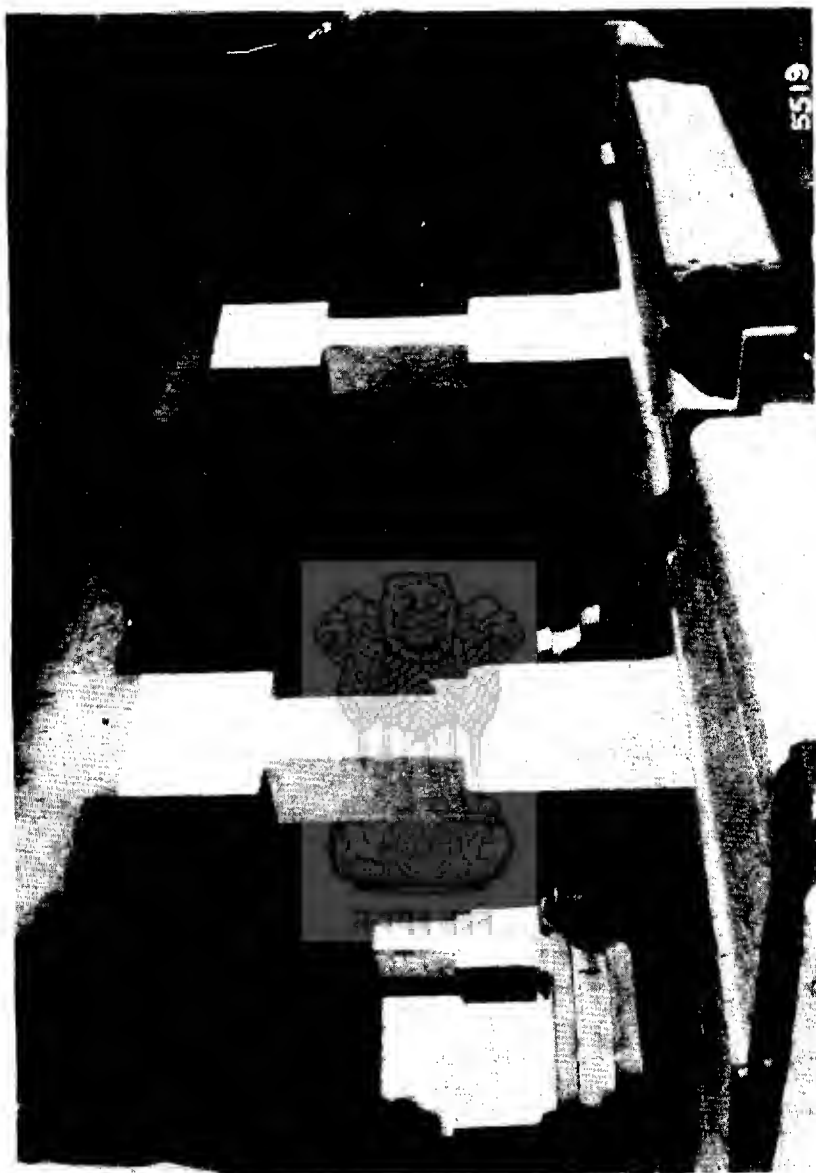
The tradition has been occasioned, doubtless, by the external resemblance of the Sittannavasal rock-cut to similar ones excavated by Mahendravarman in the Tondaimandalam and Tiruchirappalli areas during the seventh century. This ruler's association with Jainism has added to the supposition.

One of the first literati to 'fall' for Sittannavasal and the Dubreuil assignation of the cave and paintings to the Pallava Mahendravarman, was the aesthete Ananda K. Coomaraswamy. In *Bibliographies of Indian Art* (1925) Coomaraswamy described what he called "the important discovery" thus: The principal subject preserved represents a lotus tank with human figures which covers the whole extent of the varandah ceiling; beside this, there are figures of devadasis on the pillars of the facade.

The interest generated by Dubreuil's publication and, presumably, Coomaraswamy's prestigious mention led to a series of studies that is yet continuing¹.

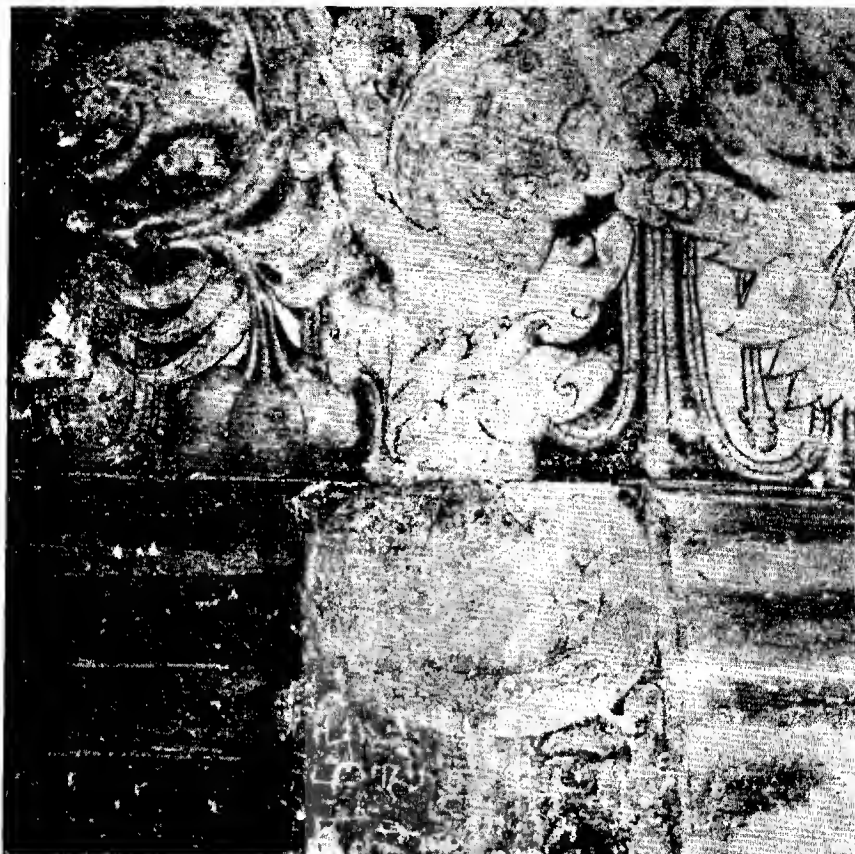
But the Mahendravarman theory is coming increasingly to be questioned.

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- ¹ See a. G. Jouveau-Dubreuil—'Pallava Paintings', *Indian Antiquary*; 1923.
 b. Mehta, N. C.—*Studies in Indian Paintings*; 1926.
 c. Sundara Sarma, M. S.—*Sittannavasal Frescoes*, Triveni; 1930.
 d. Ramachandran, T.N.—'The Royal Artist Mahendravarman' *Journal of Oriental Research*, 1933.
 e. Balasubramanyam, S. R.—'A Note on the Fresco painting at Sittannavasal'; *Journal of Oriental Research*, 1935.
 f. Paramasivan, S.—'The Mural Paintings in the Cave Temple at Sittannavasal—An Investigation into the Method'—*Technical Studies*, Harvard University 1939.
 g. Srinivasan, K. R.—'South Indian Paintings'; *Proceedings of the Indian History Congress*; 1944.
 h. Rowland, B.—*The Art and Architecture of India—Buddhist, Hindu Jain*; Penguin Books, 1953.
 i. Venkataraman, K. R.—'Sittannavasal and Kudimiyamalai Monuments'; *Transactions of the Archaeological Society of South India*; 1956-57.
 j. Ramachandran, T. N.—'Cave Temple and Paintings of Sittannavasal' *Lalit Kala* (Number 9); April 1961.
 k. Thapar, Romila—*A History of India*; Pelican Books, 1966.
 l. Pillai, Suresh. B.—'Chittannavasal: The Abode of Jains', *Asian Travels*; January 1974.



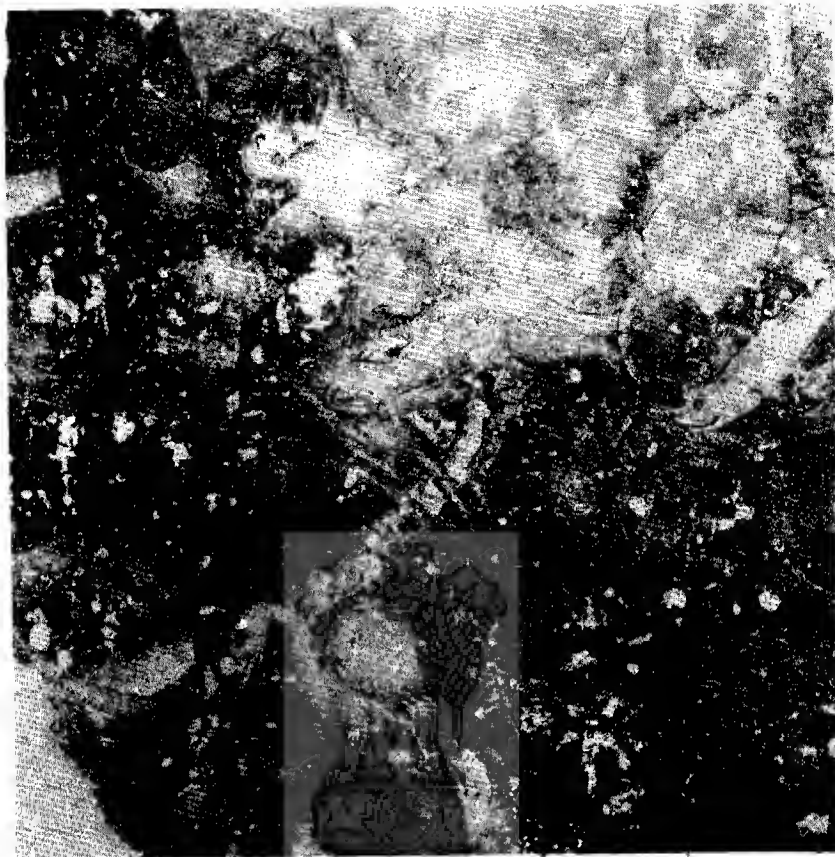
Sittannavasal cave front.

Courtesy: Archaeological Survey of India



**Decorative representations of mangoes and lotus buds, flowers and leaves on lintel over entrance
with twentieth century epigraphy — a scene from the Sittannavasal fresco**

Photograph taken without flash by M. Krishnan



Ducks with talons, fish, a makara (centre) and 'tailed' lotus leaves — scene from the Sittannavasal fresco

Photograph taken without flash by M. Krishnan



सत्यमेव जयते

Historiographic attention has recently been called to a relatively neglected inscription¹ on the surface of the rock near the southern end of the verandah or ardhmandapam. This epigraph states that a Jaina teacher named Ilan Gautaman also called therein the "Madirai Asiriyar" or the "acharya from Madurai", renovated the ardhmandapam and added a mukhamandapam in front of the cave temple (which is described in this inscription as the "arivar-kovil" or "the temple of the arhat") in Annalvayil village in the reign of the Pandyan king Srimara Srivallabha, also called Avanipasekhara². The rock-cut temple as we now see it, therefore has known renovations. This is not, of course, to deny that the original cutting was executed in a unified operation³, covering most of the cave.

It has been held⁴ : "Thus a date like the 7th century A.D (Mahendravarman's period) with possible Mahendravarman authorship can go to the part comprising the sanctum and its unfinished verandah in front, while the rest of it as one sees today came into existence in the 9th century".

But even the main excavations cannot be categorically deemed Pallava. In this context the following observation⁵ is pertinent. "The reference in the Sendalai pillar inscription and in the Velvikudi grant to Kodumbalur and one or two other places in the former Pudukkottai State indicates that in the 18th century all these places were within the territory of the Pandyas. The earliest Pallava inscriptions within the Pudukkottai territory belong to the reign of Dantivarman (804-845) ; there are a few others dated in the reigns

¹ The inscription had been first noticed by V. Venkayya of the Madras Epigraphical department, as early as 1904 (Manual Reports on Epigraphy 1904-05 ; p. 47). Its significance to the dating of the cave-temple and its paintings was first discussed in its application to the monument by K. R. Srinivasan (*ibid*) in 1944.

² Regnal years : A.D. 815-62.

³ It is obvious that in the actual excavating operations, the ardhmandapam would have been cut first and the inner shrine, next. Without the former, in some form or another, the latter could not have come into existence.

⁴ *Lalit Kala*, 1961 by T. N. Ramchandran.

⁵ K. R. Venkatarama Aiyar in a paper read before the Archaeological Survey of India, 30-4-1955 ;

of Nandivarman III (844-866) and Nripatunga (850-96). A line drawn from Rajalipattu to the north of Kodumbalur in the north-west of Pudukkottai State to Kunnandarkovil in the north-east would mark the southernmost limit of the provenance of Pallava inscriptions. This line is about 20 to 23 miles to the south of the Kauveri and none of the Pallava inscriptions on or near this line is earlier than the closing years of the eighth century or the beginning of the ninth. More than 15 miles to the south of this line and more than 35 miles to the south of the Kauveri line lies Sittannavasal and still farther away to the south west is Kudimiyamalai. These two places were never under Pallava rule: . . . ". Venkatarama Aiyar also refers to Mahendravarman's inscription in the Mandagapattu cave temple in South Arcot which says that *this* temple (the crucial word employed is *etad*) was the first one to have been scooped out of rock in the Tamil country. Is it not odd, asks Aiyar, to say that Mahendravarman had earlier excavated a cave temple for the Jaina Tirthankara in Sittannavasal, a place far beyond the frontiers of his realm? K. A. Nilakanta Sastri observes in *History of India* (Part I ; page 164) : " The paintings in the Sittannavasal Jain cave, formerly ascribed to the seventh century (the reign of Pallava Mahendravarman), are now seen to be much later and to furnish a connecting link between Ajanta and the Tanjore paintings of the Chola period ".

नवममन जयन

The Murals.—Studies of Sittannavasal have largely focussed on the paintings which engaged the concern of the Pudukkottai Darbar also not a little. Radhakrishna Aiyar's description of these as " fresh " (as also the indication in Jouveau Dubreuil's note that the paintings were in good condition in 1920) must be taken to contain an element of enthusiastic exaggeration for we find, in 1937, steps being contemplated for the urgent preservation of these paintings. To be sure, a new element of damage had crept in between the years 1920 and 1937 ; a good many pseudo-artists and copyists who had come to Sittannavasal after the Dubreuil-Coomaraswamy notices left behind tracing paper glued on to the surface. They had also damaged the murals by the application of water from the dirty pond (तारन-अडैसा), nearby or even egg emulsion for temporary brightening.

The ceilings of the sanctum and ardhāmandapam contain the celebrated murals. The paintings have been described¹ thus: "A canopy of carpet pattern is over the Parsvanatha niche with full-blown lotus flowers and buds against a background of lotus leaves. The ceiling on the north over the niche of Tiruvasiriyān, contains a similar canopy of carpet-pattern with a background of circular floral designs. The ceiling of the sanctum has a carpet-pattern canopy over the sculptures on the back wall with ornamental borders and a pattern of squares and circles within. The circles present crosses with two human figures above and two lions below the horizontal arm of the cross while the interiors of the squares contain circular floral designs. In addition to these three canopies and the area containing the dharmachakra carving, we notice on the ceiling of the shrine and the varandah, a continuous and by far the most important theme painted here, viz., a tank featuring lotuses, lilies, fishes, a makara, birds, elephants, buffaloes, and three men (bhavyas) wading in it, and gathering flowers. The bottom side of the beam, which can be divided into three spaces between corbels, shows on one face, a canopy with lotus and foliage issuing from makara heads and on the other two faces, canopy designs of conventional floral patterns. There are paintings on the rolls of the corbels as well as the median bands of the two central corbels show foliage and lotus buds while the two different pairs are marked by springs of foliage. The facade beam presents on its exposed side, floral designs, painted bands and parallelograms. Coming to the cornice above the facade, we notice that the under-surface is divided into five parts by four bands, the central area painted with a canopy of lotuses and lilies, the bands on either side of the two ends filled with canopies of conventional floral patterns. We now come to the pillars of the facade and to their upper octagonal parts, wherein are painted two dancing apsara girls. The paintings on the top of the southern pillar reveals on its northern face, a king with his queen standing behind him, while a man is in front. This king has been identified as Mahendravarman I by some scholars and as Indra or

¹ *Lalit Kala*, 1961.—Ramachandran's description above is almost wholly based on K. R. Srinivasan's 1944 study mentioned earlier.

Ardhanirisvara¹ by others. Much of the painting on the face of the pillars and pilasters and on the walls and the painted stucco on the roughly finished sculptures is lost".

S. Paramasivan,² then archaeological chemist at the Government Museum, Madras, whose services were requisitioned by the Darbar for the purpose of cleaning the frescoes, informed³ Sir Alexander Tottenham, the Administrator, that the murals had suffered greatly due to (i) high winds laden with moisture and direct sunlight attacking the surface over the centuries, (ii) an algal growth that covered part of the paintings, (iii) a waxy substance left presumably by insects on another part, (iv) insect cocoons and wasp nests, (v) thick lime marks, charcoal marks and tar marks, (vi) dirt and smoke deposits.⁴ The Fogg Art Museum, Harvard University, U.S.A., to which the chemist sent specimens of the Sittannavasal stucco for confirmatory second analysis, reported that the black substance covering the layer of painting was of organic origin, "mold mycelia or algae". The paintings were reported as dim and in danger of peeling off. In the inner shrine, particularly, he informed the Darbar, the painted stucco was "hanging loose with pockets of air between the plaster and the 'ground'", precluding the application of the slightest pressure.

¹ The identification of this figure as Ardhanarisvara or Mahendra Varman is palpably erroneous. It may represent the Pandya king Avanipaskhara Sri Vallabha who is extolled in the inscription describing the renovation by Ilan Gantaman.

² Joined Government Museum, Madras, as first Archaeological Chemist and organised the Chemical Laboratory for Research; later joined Archaeological Survey of India as Assistant Archaeological Chemist in charge exclusively of preservation of paintings.

³ Darbar Records, Pudukkottai.

⁴ Smoke has, apparently, been a traditional enemy of frescoes in caves and not just in India. R. M. and C. H. Berndt write in *The World of the First Australians* (1964): "Ayers Rock, for instance, is well-known these days. Spencer (1928: 165-76) Mountford (1948: 80-91) and Harvey (1960: 63-76) have all discussed this remarkable stone monolith, with its paintings of animals and creatures and human figures. Spencer writes of many shallow caves and shelters round the base of the Rock, that their roofs were blackened which the smoke from small camp fires and their walls thickly covered which drawings! Mountford, who came along nearly fifty years after Spencer's visit in 1894, reports that a series of photographs taken at one site, 'at five-year intervals showed that many of the designs recognizable in 1930' were faint and some indecipherable 'ten years later'." A similar phased programme of photography can be undertaken in Sittannavasal with advantage to evaluate deterioration,

He recommended that the murals¹ be cleaned and coated with preservatives. Some more cleaning and application of vinyl acetate preservative and filletting was done.

The most significant result of the cleaning operation² was the sighting, in the temple's inner shrine of a layer of painting behind the surface painting. "In two places", the Darbar was informed, "there are unmistakable evidences of an underpainting". This may justifiably be regarded as a second discovery of Sittannavasal. It has been observed: ".....the present layer of painting on the ceiling of the (inner) shrine was superimposed on an earlier layer of painted plaster with the result that the addition of the second layer was not perfect..... This was in striking contrast to the painting on the ceiling of the verandah where there is only one painted layer on a ground plaster well set on the rough rock surface below. To us it is clear that a fresh coating of this plaster was applied over the pre-existing painted area on the ceiling of the sanctum without removing the original painted area". S. T. Baskaran, Member, Tamil Nadu Advisory Board on Archaeology, in a special note on the subject, observes: "Archaeologically the significant point in the sanctum is the existence of two layers, of frescoes. The upper layer, which is a carpet design of circles and squares spreads over a major portion of the ceiling and the designs are a close repetition of each other, suggesting the possible use of stencils."

¹ Paramasivan defines (in a recorded discussion, dated 20th November 1974) the genus mural as "any wall painting" and the species as follows:—

(a) Fresco : Painting done on wet lime plaster without adding any binding medium to the pigments except water. Example : Chola paintings in the Thanjavur temple.

(b) Fresco Secco : Painting on dry lime plaster and adding lime water to the pigments on a binding medium. Example : Sittannavasal; Nayak paintings in the Thanjavur temple applied over Chola paintings.

(c) Tempera : Painting on any dry wall whether of mud or lime plaster. Plaster must be dry and as a binding medium gum or glue or similar materials used with pigments.

In a letter sent by Dr. Rutherford. J. Gettens of the Fogg Art Museum, Harvard University, U.S.A. to Paramasivan, he said: "I think you have adopted the right method. A mechanical method with the aid of some alkaline substance is the best."

² K. R. Srinivasan. 'South Indian Paintings'; 1944.

The evidence of an inner and an outer layer of paintings and the crucial Ilan Gautaman inscription has served to show that the monument is not, at any rate not exclusively, a Pallava monument of the time of Mahendravarman, as has traditionally been supposed.

A corroboration of this stand is found in *Lalit Kala* (Number 16: 1974) wherein Edward Montgomery and S. T. Baskaran discuss the paintings in the cave-temple at Armamalai, North Arcot. The motifs of the Armamalai paintings bear a striking resemblance to the lotus-pond subject of the Sittannavasal mural, although an art-historian would doubtless be able to distinguish some differences in style and execution. By a carbon-14 test¹ conducted in the Tata Institute of Fundamental Research, Bombay, on pieces of Armamalai stucco, the paintings at Armamalai have been assigned to the 9th century.

¹ Anand Doraswami of the T.I.F.R., writes: "What is a Carbon-14 test? Carbon-14 is a radioactive isotope of carbon; i.e. in every chemical respect it is the element carbon, but owing to the presence of extra neutrons in the nucleus, it emits radioactivity and in the process decays into lighter elements. Every radioactive element has a fixed rate of decay so that in a given time, one kilogramme of the substance would be reduced to half a kilogramme; in an equal time, the half kilogramme would reduce to a fourth of a kilogramme; and so on. This period is called the half-life of the substance. Now, naturally occurring carbon always contains traces of carbon-14 (this is true of any element and its radioactive isotopes) so that if one estimated the proportion of carbon-14 in the carbon of a sample of stone (lime-stone, sandstone, marble, granite, all contain carbon as one of the constituent elements) and if one knew the original proportion of carbon-14, one could calculate from the half-life of carbon-14 how old the sample of stone is. One knows the original proportion of carbon-14—it is always the same as what is prevailing on the entire earth at present. The point is, that carbon-14 has a suitable half-life (neither of the order of lakhs of years, nor a few days) to be suitable in solving archaeological problems. Other more long-lived substances are useful in the geological field, for dating fossils, etc."

K. R. Srinivasan, in a Note for the *Pudukkottai District Gazetteer* offers a word of caution regarding the dependability of a C-14 test: "It (the test) has its limitations—particularly significant in respect of recent antiquities i.e., those which are only a few centuries old. While it may be nearer the mark in respect of materials which are one millennia old as, for example, proto-historic and pre-historic (human or human artifacts) and pre-human material. The result obtained is given as a date 'X' plus or minus 100 or even, sometimes, 200 years. If, for example, in the Armamalai material the result is something like A.D. 950 plus 100 or minus 100 years, how does it help in the actual dating process in historical times? As long as the test has not been made on the Sittannavasal material can we take a 'parallel' case as quite clinching?."

The brightest and most interesting part of the stucco is on the ardhmandapam ceiling-centre. The figures of the bhavyas and the floral and faunal motifs have a quiet beauty about them. Salim Ali, the noted ornithologist, who was requested to give an assessment of the birds depicted at various places, therein, writes¹: "The lotuses, elephants, buffaloes and fish in the paintings are obvious enough, but on what basis the birds have been identified² as ducks, geese, and saras I am totally unable to comprehend. Except for the fact that they are shown on a lotus pond, I see nothing in the figures themselves to suggest these birds. The bills are distinctively pointed, not flat and blunt as in a duck. The feet, where visible, are not webbed and moreover show a boss on the tarsus which looks singularly like a short blunt present in the pheasant and partridge family". K. R. Srinivasan regards the bird as a representation of the 'chakora'. M. Krishnan, the naturalist who photographed parts of the mural, has given a somewhat different identification. He observes:³ "...it is some kind of Lesser Whistling Teal above the tarsus and a bird of prey beneath that point, most probably a hawk—no such kind exists, of course, but what of that?" Krishnan adds: "Many of the animals and plants depicted in these frescoes just do not exist, and never did. My first picture shows three unquestioned mangoes which all stem from a common point of attachment, as if the inflorescence of the mango was an umbel—the strictly bifarious arrangement of the mango leaves above the fruits is also something unknown to nature..... The central makara-like creature in this picture is of fascinating interest; it has no forelimbs but, tadpole-like, has hindlimbs or at least one hindlimb; its eye is prominent and expressive and it has a fearful set of fangs and is evidently a predator with a rapacious appetite. Even the much-vaunted lotuses of the lotus pond are imaginative; many of the leaves and even some of the flowers show a sharply cleft leaf with each cleft being prolonged into a curvaceous claw, just below the leaf proper or the flower a hypophyll and not an epiphyll, unknown to the family of the lotus and the water-lily. The elephants in the third picture are inept: the placing of their eye is much too high."

¹ Letter to the Editor Gazetteers, Madras, dated 6th November 1975.

² By T. N. Ramachandran in *Lalit Kala*, 1961.

³ Note for the *Pudukkottai District Gazetteer*.

Salim Ali and Krishnan have studied the paintings from the viewpoint of their scientific disciplines and observations of nature. An artist, however, idealizes his glimpses of real life. In what appears to be a recognition of this principle, it has been stated¹ "Among the few monuments of post-Gupta wall-painting are the decorations of a Jain temple at Sittannavasal, near Madras. The style perpetuates the Ajanta wall-paintings of the late Gupta and early Chalukya types, both in drawing and colouring. . . . the fanciful and intricate setting is portrayed with the greatest clarity and a feeling for the decorative possibilities of the multiple lotus-flowers and buds set off against the enormous leaves. The direction of the lines in the composition suggests a movement across the panel, as though a wind were bending the heavenly blossoms".

It has been noted² that the limitation of space forced the Sittannavasal artist to overlap and crowd his subjects in a jostle. This he has done masterfully so that a multidimensional and multi-angle view can be afforded. The fronts of flowers and leaves are seen, as also the tops and sides.

In a sense, he maintains, the treatment can be seen to demonstrate the 'cubist' principle that a skilful use of geometric lines can create the multi-dimensional effect so necessary for achieving an illusion of space. The medieval painter who worked in this twilit cave was no art-theorist and knew nothing about the cube. But he evidently appreciated by instinct, as it were, what was required in line, colour and form to give his idea spatial expression.

In what seems the most credible explanation³ of the theme of the ceiling mural, it has been identified with the Jaina concept of the Khatikabhumi before the samavasarana: "That which is the most common event in the lives of all the Tirthankaras and which has received plastic representation in all the Jaina monuments and temples is the samavasarana which is one of the most attractive heavens or heavenly pavilions created by Saudharmendra for the jaina to sit and discourse. . . The structure. . . is surrounded by seven bhumis or regions. . . The second bhumi or region is called the khatikabhumi or the region of the tank. According to

¹ Benjamin Rowland in *The Art and Architecture of India* (penguin Books 1953).

² By S. T. Baskaran in a recorded discussion, dated 22nd November 1974.

³ T.N. Ramachandran in *Lalit Kala*, 1961.

Sripurana, a work on Digambara Jaina iconography, this region is described as a delightful tank with fishes, birds, animals and men frolicking in it or playing in it. The bhavyas are said to get into the tank, wash their feet and place themselves as best as they can. And our painting shows this tank region....."

The fronts of the two pillars in the ardhmandapam contain extremely faded figures of two dancing apsaras whom Coomaraswamy has called devadasis. While these figures occupy but a small part of the total stucco, they have consistently received great—even disproportionate—attention. Dubreuil, Coomaraswamy, T. N. Ramachandran have all mentioned them as a distinctive part of the Sittannavasal murals. R. Krishnamurthi (Kalki) in his celebrated novel *Sivakamiyin Sapatham* (1946) has, in fact, woven quite a legend around them. The postures adopted by the figures have been held¹ to be relatable to the Bharatanatyam dance form by T. N. Ramachandran. "The problem in the study of the two dancing apsaras in the Sittannavasal frescoes is that here some of the major angas (limbs) involved are missing. We have to reconstruct the possible karanas (units of dance made of three basic elements involving postures of legs, hands and body; there are 108 karanas) here with only the angas available. Whatever hypothesis we make has to be incomplete to that extent. T. N. Ramachandran has related the apsara on the northern pillar to the bhujangacitaka karana. This seems to be quite probable because in the Tanjore series of karanas you have a sculptural representation where the hand position is practically the same as you see here in the painting on the northern pillar. But there is, another reason why bhujangacitaka seems likely. The two pillars are at the entrance. The two apsaras adorn each of these pillars. There is a certain symmetry in their positioning. Could it not, therefore, have been the intention of the artist to depict them in the same karana—bhujangacitaka—with the hand movements alone differing? This karana involves a raising of the right leg as kunchita and stretching it on the left side, like the 'Kalmariadiya Natarajar' at Madurai. A comparison between the Ajanta and the Sittannavasal paintings is inevitable. These two Sittannavasal paintings are much more interesting in relation to the art of dance

¹Lalit Kala, 1961.

than the *apsara* figures in Ajanta. It is difficult to study the *apsaras* in the Ajanta caves from the point of view of *Natya-Sastra*. They do not appear to relate to *karanas*. From the point of view of study of the dance art I think the paintings of Sittannavasal are more important than those of Ajanta.¹⁹¹

On the northern face of the southern pillar, is another remnant of paintings showing three faint figures. One appears to be a monk, one a prince and another very dim figure in the background appears to be a princess. The last two have been variously identified as Mahendravarman I and his consort; Srimara Srivallabha and his consort; and Indra. Of possible significance here is the following observation of K.M. Panikkar in *The Determining Periods of Indian History* (1961): "An early Jain tradition would have us believe that Chandragupta Maurya having become a Jain monk retired with Acharya Bhadrabahu to a monastery in the South, Sravana Belgola in Mysore, where he is said to have fasted himself to death. This tradition is borne out by many inscriptions in and near Sravana Belgola and there is nothing improbable in it". Could it be that the Chandragupta tradition (which must have passed into Jain lore by the time the Sittannavasal paintings were executed) is depicted here, the royal personage being Chandragupta and the monk leading him, Bhadrabahu? The absence of any other depiction in Jain art of the Chandragupta story would appear to make this likelihood a bit improbable. The identification most favoured is that with the Pandya king Srimara Srivallabha whom the inscription of the renovator-painter extols.

In the sanctum, the painting contains what has been described as a carpet pattern² showing geometric designs with human and leonine figures crouched with the intersections in the pattern. A unified interpretation of the central ceiling theme and the paintings on the pillar is yet to be posited.

¹ Padma Subramanyam, artiste and research scholar in the correlations between *Natya Sastra* and ancient literature and sculpture in a recorded discussion dated 1—3—1935.

² For an allusion to the historiographic significance of the inner shrine's 'carpet' pattern see Suresh Pillai's article in *Asian Travels*, January 1974 and Govindarajan's article in *Tamil Polil* (1937).

Tennal dies.—The Sittannavasal excavator, sculptor and artist remains in the end, as elusive as the cave's meditating Jains. Was he Pallava or Pandya? Was he a good chemist or a passable botanist? Was he read in Bharatha's Natya Sastra?

These questions, after all the exercises in archaeological hair-splitting are over, appear strangely unimportant. The one factor that remains is that on this rock, hewers of stone and painters of fresco laboured some thousand years ago. They laboured moreover with an impetus that was ideological as well as aesthetic.¹ And their achievement has been remarkable by any standards.

Sittannavasal Complex.—The cave temple is not all there is to Sittannavasal. On the eastern face of the hill is the natural cleft or cavern.² This can be approached by a route marked out on the rockface by the Archaeological Survey of India along the extreme side of the western slope up to the cavern's mouth, on the rear of the hill, called the Eladippattam (ஏலடிப்பட்டம்). *El* is 'seven', *adi* (with a short 'a') is 'step'. Railings³ along a fearful drop on the hill side protect one's passage here. A more exhilarating if risky approach is through what is called the Bear Cave (கரடிக்குகை). This is a tunnel, broad at its mouth but no more than two to three feet wide at the end of its verticle climb. Loose boulders, fissures and crags all along it make the tunnel a rock-climber's dream. There is no straight approach to this tunnel and one is obliged to crawl over the rough face of the hill to reach it. One has literally wormed one's way through the inside of the Sittannavasal hill before emerging thereafter at the tunnel's exit-point near Eladippattam.

The name has been translated by Suresh B. Pillai⁴ (following the traditional explanation of the name) as the 'seven stride band after seven or so depressions that have been cut on the slope for holding one's foot while negotiating the approach to the cavern. K. R. Srinivasan offers an interesting speculation: "The ascetics

¹ The Italian architect Gio Ponti writes: "Religious architecture is not a matter of architecture but a matter of religion". (In Praise of Architecture by Gio Ponti; F.W. Dodge Corporation, U.S.A. 1960).

² See under 'Hills' in Chapter I.

³ Set up at the instance of Sir Alexander Tottenham.

⁴ *Asian Travels*, January 1974.

who resorted to the cave performed *sallekhana* (dying by slow starvation) lying in one posture all the time and fasting to death. According to Indian tradition (including jaina) one takes seven steps of resolve in making a vow. The *सप्तपदी*—*Saptapadi* (which is a ritual in our marriages consisting of taking seven steps) is of this nature in the context of the oaths taken at the time of marriage. In the light of this *Eladippattam* can be explained as the place of penance following a firm resolve". T. N. Ramachandran relates¹ the name to the maximum length of the bed-like scoopings on the surface of the cavern's floor. There are seventeen such beds. Many of them are damaged but some are complete. They shine with repeated use.² Raised ends on one side of the beds indicate pillow-like arrangements. Most of the beds are inscribed. Jaina hermits apparently performed austerities here like the *sallekhana* and meditated. On the overhanging ledge of the cleft can be made out faint traces of a painted lotus. Conceivably, like the cave-temple on the hill's western face, this eastern cavern was also once covered over with painted stucco. The view commanded from the *Eladippattam* is of an extensive plain of paddy fields. It must once have been a waste or wild and the sages meditating on this inhospitable perch must have required considerable hardihood of mind and body. In a sense, of course, the *Sittannavasal* cave-temple, the Bear Cave and *Eladippattam*, were more than hospitable. In times of distress and persecution Jainas must have found here a most effective hideout, inaccessible to all but those who knew the hill's secrets. The *Eladippattam* beds contain an inscription in Asokan Brahmi characters of the second or third century B.C. which is one of the oldest lithic records of South India. This and the later Tamil inscriptions in archaic script relate to the person or persons who occupied the several stone beds, and range from the second or third century B.C. to the seventh century A.D. It is one of these that refers to the place as 'Chittuppo chil', evidently an older equivalent of 'Sittannavasal'.

¹ *Lalit Kala*, 1961.

² K. R. Srinivasan writes: They were originally polished. Such polishing of stone inside the caves and similar resorts are known from the Mauryan times (c.f. caves in Bihar) and similar beds in many of the natural caverns in the Tamil Nadu districts and else where. The Ilaiyar evidently prepared it for the ascetics with a polish of the surface.

To the north of Eladippattam, on the same hill at a lower level, is a tarn (சேலர்) called Navachchunai with a Naaval (Jambu) tree standing near. Like the one on Melamalai in Narttamalai, this contains inside, a submerged rock-cut cave-cell with a rock-cut Siva linga, which can be seen when the water dries up or when it is baled out. This is locally called the 'Jambunatha' cave. Of late Pandya origin, (stylistically) this would be another instance of Siva (or Vaishnava) intrusion into jaina places as evidenced by numerous instances elsewhere in the Tamil districts. The conversion of the Samanar Kudagu (Jaiva cave) in Narttamalai-Melamalai into a Vishnu temple is one such example nearer home.

The Tamil-Brahmi inscription, caves, sculptures, paintings as also the megalithic monuments such as stone-circles, urn burials and cists spread in the plains around the Sittannavasal hill, give to the site an atmosphere of immense archaeological importance. It is conceivable that the years to come will be able to reveal more about Sittannavasal's historiographic significance¹ than is even now appreciated.

TENIMALAI.

Taluk : Tirumayam.

Distance from Pudukkottai : 31 kms.

Tenimalai is an interesting village on account of its two hills separated by a chasm. On the top of the western hill is a temple to Subrahmanya. On one slope of the eastern hill is a natural cavern, called Andarnadam, with a dripline which indicates that the cavern must have been a human habitation in early times. The place was used by jainas in early times as a site for austerities and penance. An undated inscription in archaic Tamil on a boulder opposite mentions that an Irukkuvel chief of Kodumbalur paid homage to a jaina monk called Malayadhvaja who was doing penance here in Tenur-malai. The inscription reads—மலையத் வஜ்ஜன் தேனூர் மலையில் தவஞ் செய்யக் கண்டு இருக்குவேள்

¹A report on reflectance test conducted by the Central Leather Research Institute, Adyar, Madras on the colour values of the frescos of Sittannavasal, is given as Appendix B—"Colour Evaluation of the Sittannavasal Paintings."

வந்தித்து அவிப்புறம் செய்வித்த etc. The modern name Tenimalai is a derivation of Tenur-malai denoting that the village in which it stood was called Tenur. No such village exists now at the place.

It has been maintained¹ that by a consideration of the available evidence both from the side of the Irukkuvels and the jainas, "it seems possible to identify the chieftain as Anupama, who is called in the Muvarkovil inscription Sanghakrit or the builder of the sangha.". This would place the inscription and the founding of the monastery mentioned in it, sometime in the middle of the sixth century. In other words, this monument predates the Sittanavasal cave-temple. On another boulder by the side of this natural cavern is carved the image of a Tirthankara under the conventional triple umbrella.

Tenimalai must have been an important place at the time, for a leading monk to have selected it for the venue of his meditations and for a chieftain to have made a ceremonial journey to it. It will be small wonder if the spade of the archaeologists discovers at Tenimalai archaeological wealth as yet unknown.

From Tenimalai, a view can be commanded of that conspicuous hill and natural boundary, Piranmalai.

THIRUKKATTALAI

Taluk Alangudi.

Population 1,571.

Distance from Pudukkottai 6 Kms.

A good specimen of early Chola architecture (second half of the ninth century) is to be seen in Tirukkattalai. The dating of this Siva temple is sometimes based on an inscription taken as of in the reign of Aditya I (874 A.D.) relating to land grants for the temple. This is perhaps one of the few extant examples of an early temple unit with ashtaparivara shrines (8 sub-shrines) standing in tact.

¹ M. Azekiaswami in *The Early History of the Vellar Basin* (1946).

There are references in other epigraphs to the village as *Tirukarali* ('the sacred stone temple') and *Karkuricci*.

A plebian tenth century inscription of much interest is to be seen on the south wall of the central shrine : " For the maintenance of a lamp to the God of the temple for the benefit of Singan Korran, the amount that we three, Kandan Korran and his two brothers, endow, is ten *kasu*. For the standing lamp we give one *kasu*. We dedicate this one lamp to stand as long as the moon and sun endure. May this perpetual lamp be protected by the *Mahesvaras* ".

Tirukkattalai was, according to inscriptions of the fifteenth century, dated in the reigns of Vijayanagar emperors, under the immediate rule of the Pallavarayans of Vaittur-Perungalur. An other epigraph on the temple's southern wall speaks of a grant made to the temple by *Sriranga Pallavarayan*. This feudatory ordered his royal half-share of revenues from several wet and dry lands, as also fine-money realized by him, to be made over to the temple for the performance of the day's first puja.

The *Tirukkattalai* temple is a typical structural temple of the parivara complex' type with sub shrines for the relevant divinities found abutting against the prakara wall ; as different from the free standing scheme, as at *Narttamalai*, and carrying the original sculptures of the respective divinities inside them. It is datable to early 10th Century A.D.

TIRUMAYAM

Taluk	..	..	..	Tirumayam.
Population	..	..	..	5,572.
Distance from Pudukkottai	20 Kms.			

Twelve miles south of Pudukkottai is Tirumayam.

The first image to come to one's mind at the mention of the name is the picturesque old fort atop the Tirumayam hill. The walls of this fort run over the summit like a diadem. According to the *Statistical Account* (1913) the fort was built in 1687 A.D. by Vijaya



The Fort at Tirumayam.

Photo : M. Krishnan

Raghunatha Setupathi of Ramanathapuram. The fort is said to have been originally a 'ring' fort with seven concentric walls and a broad moat all round. The lines of the old outer defences are now marked by occasional remains of the works and ditch and by three main entrances, one on the north, another on the south and the third on the south-east. The walls above the rock which enclose the main citadel are comparatively well preserved. From the remains one may judge that the walls were surmounted by parapets of strong brickwork, serrated by machicolations and pierced by musketry vents. Nearly half way upto the top, to the right, is a chamber which was used as a magazine. On the top of the citadel is a platform on which a gun is mounted. To the south of this platform is a tarn. The fort was evidently handed over by the Setupati to his brother-in-law, **Raghunatha Raya Tondaiman** (1686—1730) the first Tondaiman raja, along with the palayam of Tirumayam. The cession was confirmed in 1728.

The value of the acquisition of the palayam and fort must have been fully realized by Pudukkottai when in 1733 the Tondaiman was left with this bit of territory alone after **Ananda Row**, the Tanjore general, had overrun the whole of the Tondaiman's country. Here, **Vijaya Raghunatha Raya Tondaiman** lay besieged until **Ananda Row** had retired.

There is an unconfirmed tradition that **Kattabomman** and his brother the 'Oomayyan'¹ were for a time detained at the fort before the Tondaiman handed them over to the British (**Hemingway** in the *Gazetteer of the Trichinopoly District* mentions only the 'Oomayyan' as having been lodged at this fort).

The walls of the fort on the hilltop provide an excellent perch for a view of the houses in the town with their tiled roofs, the tank and the surrounding countryside.

On the perpendicular southern slope of the hill are rockcut temples of **Siva** and **Vishnu**. The latter is a highly venerated shrine, second in sanctity only to the temple at **Srirangam**. It is, indeed, called **Adi Rangam** or the original Rangam and is claimed to be older than the temple at **Srirangam**. The **Vishnu** in this temple is

1. The word means "dumb"; the palayakar's brother was incapable of speech.

commemorated in the form of Satyamurti. The fact that a celebrated Vaishnava saint, Tirumangai Alvar, sang hymns in praise of the deity at Tirumayam's Vishnu temple has enhanced its sanctity. The Vishnu rockcut which is a natural cavern modified and enlarged into a cave temple with the tall facade pillars inserted is ascribable to the eighth or ninth century, on the strength of an epigraph in the shrine which mentions a renovation of the temple at the time (inferentially) of the Pallava kings Nandivarman II and Dantivarman. It is dedicated to Anantasayi Vishnu the reclining form.

At the southern end of the street leading to this temple is a shrine to Vedanta Desika, the famous Vaishnava saint and founder of the Vadagalai-sect of Vaishnavas and Ayyangars.

The Siva rockcut is the earliest monument in Tirumayam and has, on architectural and epigraphic grounds, been assigned to the period of the early pandyas.

It has been described¹ thus : "To the west of the Anantasayi cave and totally excavated out of rock is the Siva cave temple, now called Satyagirisvara. This excavation as in typical Pallava rock-cut architecture consists of a rectangular ardhmandapa (verandha) cut with its long axis east to west and with a southern facade of two massive short cubical pillars and two extreme pilasters of the same type with four other corresponding pilasters on the (north) rear wall all with lotus medallions in the cubes, at base and top, central octagonal chambering and heavy corbels with taranga mouldings. The shrine is a cubical chamber cut into the western wall of this mandapa, its floor reached from it by short flight of steps. The linga and pedestal inside the shrine as well as the recumbent nandi opposite on the floor of the ardhmandapa are carved out of the living rock. On the eastern wall of the mandapa and exactly opposite the shrine and cut in bold relief is a colossal Lingodbhava the earliest,—perhaps, after Gudimallam, in all South India, reaching from floor to ceiling. The niches flanking the dvāra (entrance) of the shrine depict has reliefs not of conventional dvarapalas but of what appear to be portrait sculptures, each different from the other in

¹. In a note entitled "Tirumayam—what it reveals to the Historian, Archaeologist and Epigraphist", by K.R. Srinivasan.

pose, ornament and dress. The ceiling of the ardhmandapa was painted over as in almost all Pallava and Pandya cave temples simulating a floral canopy spread over, fragments of which are still extant though dimmed by soot and smoke of ages. This pandya cave temple from its style, paintings and epigraphs is definitely attributable to the 7th century A.D. in the same way as the Kudumiyamalai (malakkovil), Tirugokarnam cave temples with the musical label—Parivadinai association are.

On the perpendicular rock face immediately to the south of the shrine and west of the facade of this rockcut temple is an area (about 25 feet long and 10 feet high) dressed to take one of the largest inscriptions of the South. At the extreme western end of this inscribed face, one could read deeply incised in Pallava grantha script of the 7th century A.D. mutilated labels denoting musical terms like sadja, gandhara, dhaivata, etc. These certainly indicate that over the entire area now covered by the later Tamil palimpsest, was a musical treatise containing notations similar to, or a replica of, the famous one in Kudumiyamalai. . . .”.

The celebrated freedom-fighter S. Satyamurti was born in Tirumayam on the 19th of August 1887, and was named after the Principal deity in the Vishnu temple.

Tirumayam, a town panchayat, is now the headquarters of a taluk and a panchayat union.

TIRUVARANGULAM

Taluk Pudukkottai

Population 1,496.

Distance from Pudukkottai 20 Kms.

At Tiruvarangulam, five miles from Pudukkottai on the Aial gudi road, is an ancient temple to Harithithesvara. A Nataraja bronze of superlative quality from this temple is now on display at the National Museum, New Delhi. The temple is interesting not only for its central shrine which has been assigned to the early Chola era, but also for the small temple which contains a male and a female figure.

The story is that an "untouchable" or "Paraiyan", who had disguised himself was appointed as Peshkar or manager of the temple and having been detected, was done to death. A devadasi lover of his out of grief committed suicide. The couple are now worshipped by the melakars of the village at this temple.

The main temple has another association with the once 'untouchable' community. According to an old Tamil prose manuscript, the temple car on an occasion broke down when an attempt was made to move it. Legend has it that the Lord thereafter appeared and decreed that the car should not be moved unless a paraiyan had broken the first coconut on the wheels of the car and touched the car ropes. The practice is observed to this day.

The temple contains 65 inscriptions belonging to the Chols, Pandya and Nayak eras. According to the *Statistical Account of Pudukkottai*, the village once contained a fort with four bastions which had fallen into ruins by 1500 A.D.

The place was once a centre of iron-ore mining and contained an outcrop of ochres on the banks of one of the temple tanks, called the Brahmakundam.

VIRALIMALAI.

Taluk Kulattur.

Population 3,046.

Distance from Pudukkottai 42 Kms.

Viralimalai, twenty-five miles from Pudukkottai, is renowned for the Subramanya temple that crowns a hillock within its boundaries. The sides of this hill have traditionally worn a coat of non-thorny trees, mainly *Wrightia* or *செட்டிமரம்*. Peafowl in their hundreds have inhabited this hillside. They are to be encountered even now although their numbers are much diminished. The name Viralimalai is said to be derived from Viralur-malai on the hill of adjoining Viralur, which is an ancient village, still extant on the south (4 miles). From inscriptional evidence of a parallel nature regarding Tenimalai, the old name of which was Tenur-malai. Viralur-malai can as well

become Viralimalai in usage. (It need not be associated particularly with the Virali shrub *Dodonea Viscosa*—which is not peculiar to this place alone but is ubiquitous throughout the district.)

The temple was once a renowned seat of the *bharata natya* dance from and boasted of a separate dancer or *devadasi* for each of the 32 movements or *adavu*. Most of the inhabitants of the village can trace their descent from the Isai Vellala or Melakar community. Viralimalai has also lent its name to an exclusive *kuravanji* or dance drama. Shyamala Balakrishnan writes¹: "Thanks to these families (of *devadasis*) the *kuravanji* named after Viralimalai has had an unbroken tradition of practical exposition for nearly two centuries. On Mahasivaratri night every year, till some fifteen years back, they used to play the *kuravanji* as an all-night show to large admiring crowds of nobles, officials and ordinary folk, in front of the *mandapam* below the foot of the hill. Almost every *devadasi* family of the place had a *manyam* (land grant) for dance and two of them, in particular, had special additional *manyams* for the Viralimalai *kuravanji*. It was their business to keep alive the tradition of the *kuravanji* which they did until they were forced out of it owing to socio-legal changes."

The deity presiding over this temple is offered by way of '*nei-vedya*' every evening at the day's last *puja*, the most curious of objects: a country cigar (*Suruttu kalanji*).

Tradition holds that the deity of Viralimalai Murugan, appeared before a pilgrim at the temple-town of Vayalur and so overwhelmed him, as to bring him to Viralimalai where he composed a set of sixteen songs of great metrical skill, included in the anthology known as the *Tiruppugazh*. The author, who had earlier, led the life of a libertine, thence became famous as Arunagirinathar, the great saint and exponent of *Saiya Siddhantha*. Whatever be the truth of the tradition, Arunagirinathar's songs are one of the precious legacies of Tamil literature. They have been placed in the fifteenth century.

1. Unpublished thesis; 1962.



The Tiruvarangulam Nataraja, Pudukkottai Museum.

Photo : M. Krishnan

Apart from their devotion, Arunagirinathar's songs contain a vivid description of Viralimalai and its surrounds. A stanza from one of these songs is rendered below :—

கூதாள நீப நாக மலர்மிசை
சாதாரி தேகி நாம கரியைமுதல்
கோலால நாத கித மதுகர மடர்சோலை
கூராரல் தேரு நாரை மருவிய
காணு பாபு மேரீ வயல்பயில்
கோனாடு சூழ்வி ரானி மலையுறை பெருமானே:

These lines may be rendered as : " In *konadu*, where beetles haunt the *kadappai* and *sura-p-punnai* flowers for their nectar crowding the woods, and where the hum¹ of their flight suggests the *ragas saauari*, *desi* and *namakriyai* ; and where herons hunt in the stream-fed lakes for the *aaral* fish and where agricultural fields abound, lies Viralimalai". Arunagirinathar refers to peacock on the Viralimalai hilltop (where they are to be seen to this day) in the 357th poem of the *Tiruppugazh*, which describes Viralimalai as a place : " . . . where the peacocks dance on the hilltop and the dark beetles hum after sipping nectar from the flowers, and the Indian laburnum² showers its flowers of gold . . .".



¹ M. Krishnan writes : " The hum or song of beetles is, of course, no vocalisation, but the sound produced by their wings in weaving, circling flight. It is melodious or suggestive of melody at times—and at times (when the beetle is flying round and round) sustained. What the sound suggests to the human ear is not dependent on the acute sound-perception of individual human beings but on their imagination. A number of beetles in droning flight can be impressive to the ear."

² The Indian laburnum (*Cassia Fistula*) is the sara-k-konrai of Tamil the abundant, lovely, pure yellow flowers of which are sacred to Siva.

APPENDIX I.

Excavations of Megalithic Sites in Pudukkottai District.

[(K. S. RAMAGHANDRAN).]

INTRODUCTION.

Sittannavasal ($10^{\circ} 27' N$ $78^{\circ} 43' E$), famous for the Pandyas rock-cut cave with jain paintings is situated 16 km from Pudukkottai, on the Pudukkottai-Annavaasal road. The hillock here contains a natural cavern with stone-beds bearing label inscriptions in Tamil language and Brahmi script and is assigned to jain munis.

Megalithic burials at the Sittannavasal foothills are located in three groups : (i) on the either side of the road from Pudukkottai to Annavaasal ; (ii) on either side of the road branching off to the Sittannavasal rock-cut cave near the Aiyandar temple ; (iii) on the foreshore of the Sengulam tank near the Sittannavasal village.

The first group consists of two types of burials: (i) portholed slab cists demarcated by a stone-circle, mostly of dressed laterite and occasionally of granite boulders and the whole covered by cairn-rubbles; and (ii) a rectangular enclosure of slabs and boulders where one of which is a tall slab resembling a menhir, and a balustraded passage covered over by a thick-slab. The inside was found filled up with earth and cairn rubbles.

A peculiar feature found in this group is a huge rectangular enclosure of stone-boulders and thick slabs, partitioned into more than two rectangles. This had a sort of portal—two vertical slabs positioned as jambs (whether there was any lintel over it, nobody knows), in front of which there was a covered passage—two vertical slabs buried, over which was found another flat slab as a cover. It was observed that the cists with dressed lateritic circle stones were segregated to the north and north-east of this huge rectangular structure while the other type was found on the south and south-west. Most of the megaliths were disturbed they having been excavated, rather scooped out.

The second group comprised stone-circles having granite boulders for the bounding circle and a capstone in the centre ; and cists surrounded by dressed laterite circle-boulders. Here again segregation of the types were observed.

The third group found on the foreshore of the *sengulam* tank consists of transepted-cists with ante-chamber and surrounded by a circle of dressed laterite. Exceptions to the firm granite circle-boulders are also found, but rarely. In all cases capstones are missing.

It is a significant point to observe that in none of other two groups, this type viz., the transepted cist, is to be found.

Excavation.—Three megaliths, one in the first group, and two in the second were taken up for excavation. Besides, a disturbed transepted-cist was also tackled in the third group. The purpose of the excavation was to find out primarily, the nature, content and characteristics of the megaliths in the Pudukkottai region with the ultimate aim of comparing them with similar burials in other parts of South India. For easy identification and reference, the excavated burials have been labelled as Megs. I to IV.

MEGALITH I.—This is a unique type, the bounding boulders being placed in such a fashion as to make a rectangle. These boulders are of varied sizes and shapes ; occasionally, one slab have also been used. The interior, as usual, is filled up with local clay and granite rubbles. On the south or slightly towards south-west is planted, in the place of one of the bounding-boulders, a tall menhir-like slab. On the north-west is a passage into the enclosure, formed by two vertical slabs, one of each side of the circumscribing boulders. Over these verticals rests a huge slab as a cover for the passage. The monument measures 7·7 X 6·4 m. Digging inside revealed from bottom upwards : colloidal whitish gray clay over which were found dumped stone rubbles.

In the centre of the enclosure was a pit, rectangular in shape, with its longer axis roughly east to west., and in alignment with the passage. The outline of the pit was indicated by a concentration of rubbles. The pit had been dug upto the natural bed-rock which

at some places, had disintegrated i.e., rock-rot. The pit measured approximately, 2.9 m. long 1.6 m. broad and 1.4 m. deep. The filling inside the pit consisted mainly of rubble and local clay ; towards the bottom, however, the quanta of rubbles decreased. The nature of the filling had contributed, in no less a degree, to the damage to the interment inside.

The pit concealed only pottery which was found placed at all levels. Due to the weight of the overlying filling and the stone-rubble, the pottery in the higher levels had been broken. Further, from the scatter of sherds on the upper levels, it could be inferred that, after placing the pottery, rubble and earth were thrown into the pit unceremoniously. In the lower levels pots were in comparatively good state of preservation.

Shapes of the pottery comprised mainly, dishes, bowls and vases. Dishes had a saggar base. Bowls were both round bottomed and conical. The burial pit did not contain any iron object or skeletal remains.

Details of construction.—To erect this monument, it appears, that the required space was cleared and cleaned initially and then the bounding enclosure was constructed. The size of the stones being unequal, slight depression was made wherever necessary, to plant the huge boulders. In the case of the huge menhir like head stone, a deeper pit was dug so as to ensure stability. In the case of the passage too, two slits were made into which the verticals were inserted ; the intervening space between the slab and the pit was packed with rubbles. The vertical slabs were flush with the outer alignment of the rectangle. On the inner side, however they projected a little. In alignment with this passage was the rectangular pit which was, in all probability, the last to excavate. Having made the pit ready, furnishings in the form of pots and pans were brought into the enclosure through the passage for the ceremonial interment. After this ritual, the central pit was filled with the excavated earth and rubbles. Over the filling of the pit came the clay and rubble filling of the entire rectangular enclosure. Finally, before abandoning the area, the passage was closed by huge granite slab, nearly one third of which rested on the ground outside beyond the vertical slabs, thus indicating the passage.

MEGALITH II.—This is in the second group of burials and is located on the left side of the road leading to the cave temple. Typologically this is a stone-circle the bounding stones of which are of granite. In the centre is to be found a capstone with a few rubbles on top, the rest being washed away. The monument is on a sloping ground and hence the cairn-rubble filling inside has also been eroded.

The stone-circle measured in diameter 2.65 m. East to west and 2.20 m. North to South. The capstone in the centre was of the size 1.45 × 1.18 × 0.25 m.

Removal of the capstone revealed an oblong pit, very shallow on the eastern half, where the grave-builders encountered the bed-rock almost in the middle, which naturally restricted the grave digging activity to the western side. Digging inside the semi-circular pit revealed an urn covered over with a black and red lid; both damaged due to the overlying weight of the capstone. The pit measured 90 cm. in diameter and 65 cm. in depth.

The interred urn showed a slight tilt towards the east. In between the urn and the bed-rock was found a small ring-stand. Inside the urn were found the usual megalithic pottery, all of them badly damaged. The filling inside was of colloidal clay. Streaks of sand found inside was perhaps due to percolation. As many as fifteen pots were found huddled inside the urn. These were conical lids with bud finials, shallow dishes, ringstands, etc. The urn had a chord design at shoulder level.

CONSTRUCTION.—Initially, the required space was cleared and the pit for the interment of the urn dug. After this, the urn was lowered, the placement of pots and pans was completed and the pit covered with self-same dug out earth. The capstone was then placed over the interment. The bounding circle was the penultimate stage. The final stage is filling up the enclosed area with earth and cairn rubble which, in the present instance, was missing.

MEGALITH III.—This burial is situated on the eastern side of the road leading to the Sittannavasal rock-cut cave and falls under the category of cists, as evidenced by the slight protrusion of orthostats above the sparse cairn

filling. No capstone was found. The cist is surrounded by a circle of dressed lateritic blocks which taper inside. The dressing is confined to outer surface of these blocks only. The circle measured 4.20 m. north to south and 4.30 m. east to west in diameter. On the surface, the space on the inner side between the orthostats and the bounding circle was found to be filled up with earth.

Excavation revealed that this earth-filling was superficial, about 5 to 10 cm., thick. Beneath were found cairn rubbles of all shapes—round flat, etc. They were mainly granite, while some laterite pieces were also found. Below the cairn was sandy earth filling.

The cist-chamber is constructed of granite slabs with a narrow passage to the east; the passage is lined with granite slabs and is confined to the southern end of the cist on the eastern side. The bottom of the passage is in level with the bottom of the port-hole in the eastern orthostat. The vertical slabs of the passage almost touch the laterite circle-boulders. This passage is filled up with heavy boulders of granite, so that the covering slab of the port-hole stayed in place. The passage did not contain anything. The cist-itself measured 1.30 × 1.36 m. inside.

Inside the cist from top downwards, the filling comprised sandy earth, and rubbles of granite and laterite. The concentration of rubble filling was on the south-west corner. This perhaps indicates that the stones after a certain height rolled down and got embedded wherever possible. This filling was found right up to the floor-level of the cist. Underneath the rubble filling were two large urns placed on their bellies; their mouths faced the port-hole on the east. The urns were damaged due to weight and impact of the rubble filling. Yet, one was comparatively less damaged, probably because of absence of rubbles over it. The urns did not contain anything except a fragment of an iron blade in one.

The urns had lids in the form of a large and deep black-and-red ware bowl. Concentration of pots and pans were seen on the eastern side, the only vacant area. Pots were also seen in the space between the two urns. Beneath the urn on the northern no pots had been placed. However, an iron sword found underneath

near the western orthostat running parallel to it. No floor-slab was seen, the bed-rock having been roughly levelled up. Below the other urn, however, were pots and iron objects.

Pottery, which were of the usual megalithic fabric, consisted of conical and funnel-shaped lids, round bottomed pots, deep bowls funnel-shaped lids with finials, varieties of ring-stands, etc., Iron objects comprised sword, dagger, sickles an indeterminate object with a handle, etc.

CONSTRUCTION.—To build this megalith, the first step, as in others, was to clear the required space followed by digging the passage and the central pit, all of required dimension. After this preliminary is completed the orthostats were placed in position followed by lining the passage with stone-slab verticals. Now that the cist chamber was made ready to receive the interments, pots and pans and iron weapons were introduced into the cist. Then the urn was interred and more pots were placed in the vacant space. After the interment, initial filling up of the chamber was commenced, relatives and friends taking part, throwing stones and earth through the port-hole. It is quite possible that some of the pots, pans, etc., were also passed through the port-hole. After the filling had reached a certain height and the ritual over, the port-hole was closed by a thin slab and the passage filled up with heavy boulders. At the penultimate stage, the bounding circle-stones were positioned and the inner space between the cist and the bounding circle filled with earth, cairn filling and again earth. It has been already observed that the cist did not have a capstone. Either the capstone had been removed later or there was no capstone at all, the later appears to be more probable as in most of the cases capstones over cists are missing. This would also explain the find of earth filling capping the rubble inside the cist-chamber. This is only an inference and needs confirmation.

MEGALITH IV.—This is a rifled transepted-cist in the third group of megalithic burials at Sittannavasal and was taken up with the sole aim of ascertaining the constructional peculiarities. The monument is circumscribed by a circle of dressed (dressing on the outside only) laterite blocks

The circle measured 6.50 m. in diameter. The cist is found in the centre and the orthostats projected above the cairn level. The cist was divided into two northern and southern halves by a septal slab, which had two port-holes—one at the top and the other at the bottom. The bottom one was semi-circular in shape, this having been cut right from the lower edge. The upper one must have been circular. The septal slab is broken at the top. On the southern half, over two verticals on either side was placed a horizontal stone-slab—the whole construction resembling a bed, which was above the height of the lower port-hole. This is termed as the *bench*. While the verticals survive, the slab laid horizontally was missing. The verticals were held in position by a buttress of stone rubbles. Removal of the debris on the southern half revealed that there was no flooring slab but the bed-rock-disintegrated granite—had been roughly levelled up. In the centre of the cist-chamber was a depression. The septal slab divided this into almost equal halves and into this were found few pots, dishes, ring-stand, etc. The northern half, when cleared of the accumulated earth, revealed a floor made of almost uniform flat stones. In order to reach the bottom these were removed and underneath a thick layer of earth were found several pots, dishes, ring-stands, lid, iron objects, etc., These were placed on a floor of granite slab, not sufficiently covering the entire area. The floor-slab had been placed over the roughly levelled bed-rock. The furnishings were in more than one layer.

On the eastern side of the cist, is the ante-chamber. The northern end of this is in alignment with the northern orthostat of the main cist. The ante-chamber had been lined with stone slabs on all sides, and opened into the port-hole in the eastern orthostat of the cist. The port-hole had a thin door slab kept in place by a huge single granite boulder.

The cist measured 1.65 X 1.50 X 2.45 m, while the dimension of the ante-chamber was 1.0 X 0.08 X 1.4 m. It is not known whether there was any grace furnishing in the northern half over the false floor. But from the reports of earlier excavations, it appears there were. In that case, the furnishing below the false floor is a new feature hitherto unknown and appears to be a special feature in transepted-cists.

CONSTRUCTION—Construction process for this type of monument is similar to that of the cist (Meg III) already described. The only difference being the additional placement of the septa-slab and the erection of the bench in the southern half of the cist.

Furnishing inside the cist-chamber consisted of pottery, viz., the Black and red, all black and red wares and iron objects. Pot forms comprised pyriform jars with flat and pointed bases, globular pots, lids, all in red ware; deep bowls with rounded base, dishes, and conical vases in Black-and-red; and varieties of ringstands and funnel shaped lids with bud-like finials in black ware. One black-and-red ware deep bowl had traces of linear designs painted in black pigment, while one red ware pot had designs in white pigment. Iron objects were represented by barbed arrow-heads, sickles daggers, sword and an object with ring loop and of indeterminate use.

GENERAL OBSERVATIONS—

1. Segregation of types of megaliths even in the same site has been observed. This aspect appears to be universal, for this is known in the Chingleput District, Tamil Nadu and also in Kerala.

2. In Pudukkottai region it is found that cairn circles enclosing urn interred in a pit are usually covered over with a capstone. This feature was observed not only at Sittannavasal but about a huge exclusively urn-burial site at Tirukkattalai, a suburb of Pudukkottai Town. The site is appropriately known as *Kalasakkadu* (literally a forest of urns). At Porkalam, Trichur District, Kerala, this type is also known.

3. As seen from actual excavations, it is known that the burial furnishings is confined mostly to the inside of the urn. However, one or two pots are found outside the urn and inside the pit. This is in contrast to what obtains in the urn-burials of Tamil Nadu or Kerala.

4. Urns inside a cist is unknown in other regions. However a sarcophagus in a pit is known in Tamil Nadu and Karnataka. The positioning of urn/urns inside a cist on its/their belly/bellie and facing them towards the port-hole is a unique feature. Curiously the urns are empty.

Cists with passage architecturally compare well with the passage graves of Karnataka. Even in Chingleput the dolmenoidists do have an incipient passage.

5. Transepted cist appears to be exclusive to Pudukkottai. Further exploration in other parts of the country might perhaps disprove this postulate.

6. The rectangular/oblong enclosure with a menhir-like head stone, a closed passage and concealing a rectangular pit is again restricted to Pudukkottai region. Parallels are to be found in Karnataka. It would be interesting to find whether this type is also found elsewhere in Tamil Nadu.

7. Painted pottery normally absent/rare in the megaliths of Tamil Nadu is found here; and is different from the usual Russet coated painted pottery which is the usual ware found in the burials in other districts of Tamil Nadu.

8. Ceramics from these burials are of the usual megalithic fabric viz. Black-and-red, all black and all red wares. Potforms, however, show a variety exclusive to the region and will have to be confirmed after a detailed comparative study of the adjoining region.

9. Complete absence of skeletal remains in any of the four megaliths excavated is interesting. In fact from the earlier reports it is deduced that none of the numerous excavated burial monuments contained human bones. The only exception was the urn burial site at Pulvayal where bones had been reported.

10. Absence of skeletal remains, but the retention of the essential furnishing in the form of burial receptacles and the megalithic architecture would perhaps point towards rapid drift from spiritualism to ritualism. This is perhaps more due to the new dominant religion, namely Jainism, spreading rapidly in Pudukkottai region anciently. This is evidenced by the juxtaposition of megaliths and Jain rock-cut-cave and natural caverns with inscribed stone-beds, ascribed to the Jain munis at Sittannavasal and the natural caverns at several places in this region.



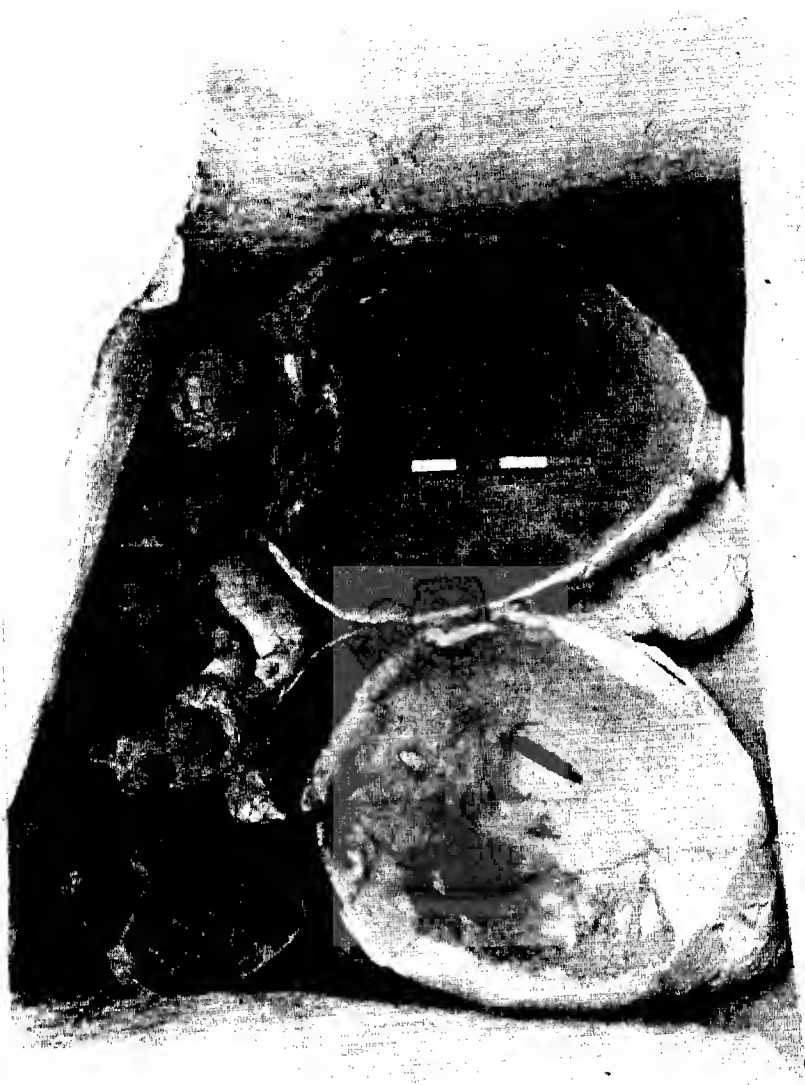
Sittanavasal, District Pudukkottai: Megalith I before Excavation.



Sittannavassal, District Pudukkottai: Megalith I contents of the pit.



Sittannarasa, District Podakkottai: Megalith I after excavation.



Sittanavassal, District Pudukkottai: Megalith III twin urns inside the cist.



Sittannavasal, District Putukkottai: Megalith IV furnishing at the lowest level of the northern chamber of the transcribed cist.



Sitranavasal, District Podukkottai: Megalith III Pottery and iron objects inside the cist.

11. The above brings to the vexed problem of the date of these megaliths. Considering other factors and keeping in view the above observation it is most likely that the megaliths of the Pudukkottai region are later than those in the adjoining regions and have to be placed between first century BC—first century AD.

12. The only problem that would remain, which would involve further study, is to assess the influence of the megalithic-folk from the surrounding regions practising a variety of megalithic architecture on the Pudukkottai megaliths.

TITLES OF PHOTOGRAPHS.

1. *Sittannavasal, District Pudukkottai.*—Megalith I, before excavation.

2. *Sittannavasal, District Pudukkottai.*—Megalith I, contents of the pit.

3. *Sittannavasal, District Pudukkottai.*—Megalith I, after excavation.

4. *Sittannavasal, District Pudukkottai.*—Megalith III, twin urns inside the cist.

5. *Sittannavasal, District Pudukkottai.*—Megalith III, pottery and iron objects inside the cist.

6. *Sittannavasal, District Pudukkottai.*—Megalith IV, furnishings at the lowest level of the northern chamber of the transepted-cist.

APPENDIX II.

Colour Evaluation of the Sittannavasal Paintings

INTRODUCTION.

At one time, the Jain cave temple at Sittannavasal (Pudukkottai District—(Tamil Nadu) was fully painted over. They have suffered damage over centuries. And yet, the extant paintings bespeak of their ancient glory.

These paintings, which date from the 9th century A.D. are important from many points of view. They are classical in character, bearing a close resemblance to the art of Ajanta.

Though these paintings had been executed in the 9th century A.D. they remained unnoticed till about the beginning of the present century, except by a very small band of enthusiasts, now and then. The paintings have been exposed to the Western sun, to spray during the rains, dustladen winds to variations in temperature and humidity and last, but not the least, to the vandalism of both the literate and the illiterate. All these have had their disastrous effects on the paintings, with the result that portions of them have disappeared or become damaged, in general, the paintings are so delicate that they have a knack of suffering sudden damages in the most unexpected manner. And eternal vigilance and proper control are needed to keep them in condition. Their preservation under conditions of scientific control is a matter of great importance.

Those who were familiar with those paintings for years ago, and those who have studied the photographs of these paintings taken at that time and compared them with similar ones taken recently, do feel that, along with the damages to the paintings, the colours have lost their original tonal values. But no scientific evaluation has been possible till now.

Photographs of paintings are usually taken as records of the general colour values of the paintings. There are the colour photographs and the black-and-white photographs. But colour photographs are not strictly true to the original and in course of time they suffer subtle changes in colour values. Oftentimes, they are not strictly scientific records. The black-and-white photographs do

bring out the details, as also some differences in the total values. But they cannot bring out the colour values and subtle shades in any scientific and significant way.

In the absence of scientific colour evaluation there will be no means of either guiding or controlling the process of preservation. Thus there is great need for a strictly scientific method of colour evaluation.

Colour measurements and Trichromatic Colorimetry.

As a result of their investigations, several scientists have described the principles, methods and applications of colour measurements that are followed throughout the world. Since 1931, the Commission Internationale de l'Eclairage (C.I.E.) adopted a set of tables to define colour matching characteristics of a standard observer and established a reference frame work for the specification of colours. The system has been improved upon from time to time. The basis of all of them is the trichromatic method.

The trichromatic method of colour measurement depends on the basic primary or fundamental qualities of the saturated Red, Green and Blue radiations. Any other colour can be reproduced with these three. For example, yellow is made up of red and green. A blue green is made up of blue and green; a purple is made up of blue and red. White is produced through a combination of red, Green and blue, in appropriate proportions. It is, therefore, obvious, that a definite system of colour measurements can be developed in terms of the amounts of the three defined trichromatic Red, Green and Blue radiations. When mixed together, they produce a complete match of the colour sample under test, including any of the colours of the wall paintings.

*1. Colour in Business, science and Industry - Deane B. Judd & Gu ter Wyszecki - John Wiley & Sons Inc., London, 1963.

2. Colour: A guide to Basic Facts and Concepts - R.W. Burnham, Randall M. Hanes & C. James Bartleson - John Wiley & Sons, Inc., London, 1967.

3. The Measurement of Colour - W.D. Wright - Adam Hilger London, 1969

Thus whatever agency is responsible for determining the composition of a beam of light entering the eye from a coloured surface, its spectral components are ultimately combined additively when focussed on the retina. It is for this reason that the phenomenon of additive colour mixture must provide the foundation for a system of colour measurement or trichromatic colorimetry.

Under normal conditions, a fairly close correlation exists between the trichromatic, specification of a stimulus and its appearance. A colour specification merely expresses an equivalence between the physical stimuli in their capacity to arise colour sensation and that the specification itself is the physical specification of a stimuli, not of a sensation. It is therefore, obvious that colour measurement does not claim to measure the appearance of colour in an abstract sense. Nevertheless, it has wide application.

In the system of measurement referred to above, Red, Green and Blue are the primary radiations. Each of the red, green and blue radiations is not simple, but complex and consists of different radiations. Hence any standard system of colour specification would require that the Red, Green and Blue should be given an exact colorimetric definition.

The C. I. E. system has divided the colour preception of the average human eye into three approximately equal zones and made colour filters such that the over-all response of the filter-photo cell combination matches one of these zones in any colour measuring device. The coloured surfaces with the same C. I. E. values will look the same and conversely, all coloured surfaces which look the same, will have the same spectral response.

Thus the tristimulus colour measurements based on the Red, Green and Blue radiations lacks strict scientific or mathematical reality, although they are apparently real for all practical purposes. Some sort of a strictly scientific and mathematical device is necessary.

The C. I. E. tristimulus values are expressed as X , Y and Z . They are obtained mathematically by evaluating the effect on the eye of the standard observer, of the spectral flux either directly, from a light source or as it is reflected or transmitted from an object. The transformation used to define the C. I. E. values was intended to produce a tristimulus value Y which would be valid correlate for brightness by making Y equal to luminance. It was agreed

that while the Red, Green and Blue was an appropriate framework within which to define the colour mixing characteristic of a standard observer, an all-positive scientifically valid system should be adopted as the standard reference system for colour specification, using reference stimuli X, Y and Z. This is a mathematical transformation used to define the C. I. E. stimulus value and produce a numerical system in which only positive members are required for specification of all the colours. Thus the C. I. E. tristimulus values represent the particular mathematical transformation from a set of three real primaries (Red, Green and Blue) to three non-real primaries X, Y and Z for reasons of conventional, mathematical and scientific convenience. They also represent the relative amounts of the non-real primary colour stimulus of the C. I. E. system to match the colour stimulus whose specification they represent.

Experimental Investigation.

In connection with the colour measurements of the Sittannavasal paintings, we used the Canadian Research Institute Model CG-6 Reflectance Meter. It is a photo-electric instrument capable of wide application. The instrument has provisions to feed it with stabilised power supply. Thus the fluctuations of the power supply is guarded against. The meter has a computer, amplifier and panel meter. The meter is directly calibrated in per cent reflectance. In addition, it has a constant light source, optical filters and photo-cell.

The meter has provision to focus a standardised light on a sample at a carefully pre-arranged angle. It measures the amount of light which is reflected back at another pre-determined angle. The light is allowed to fall normally or vertically on the sample. The light constitutes itself into a narrow cone at an average angle of 45 deg. from the surface. But it extends all the 360 deg. around the incident light. The reflected light is measured by an annular photo-cell. This arrangement enables the surface exhibiting definite directional structure to show the same reflection, no matter how they are turned within their own plane. Through this geometry, colour reflectance is measured with the use of suitable filters (Red, Green and Blue) with minimum interference from surface gloss or sheen.

Before each use, the filters are standardised against white—Magnesium Oxide (100) and Black (0) standards.

The tristimulus filters supplied for use with the instruments match the C.I.E. specifications very closely. The C.I.E. values X, Y and Z may be easily worked out from the following formulae:

$$X=0.8 R+0.18 B$$

$$Y=G$$

$$Z=1.18 B$$

where R, G and B are the reflectance values obtained with the Red, Green and Blue filters respectively.

The readings got through the use of green filter gives the Y value or the "luminosity". Measurement with the green filter alone is an indication of the "luminous apparent reflectance", or "lightness" or "whiteness". This is also termed "Brightness". These facts may be borne in mind, while going through the Tables in the Appendix.

The following equations may be derived from the above ones:

$$R=1.25 X-0.19 Z$$

$$G=Y$$

$$B=0.848 Z$$

In spite of the relative scientific merits of the X, Y and Z and the R, G, B systems, which have been already explained, most users think in terms of the latter. With some practice, one can visualise the shades with the C.I.E. tristimulus values of X, Y and Z.

The cave temple consists of an inner shrine and an outer verandah with caves. They have all been cut out of a single piece of rock. The extant paintings occur on the ceilings of the inner shrine, a few on its walls. They also occur on the ceilings of the verandah, on the caves and on the northern wall below the caves. The ceilings of the verandah carry the important paintings at Sittannavasal, namely, the "Samavasarana" scene. Next important ones are the dancing figures on the pillars of the verandah.

Considering the large painted surface, it would have been more helpful in the long run to prepare a close grid and take tristimulus reflectance measurements within the grid. This is too complicated procedure to be followed within the short time at our disposal and with our staff. We have, however, taken a series of painted subjects and taken measurements over the entire surface of them, carefully selecting the different parts of them.

For the purpose of this report, we have confined our attention to select subjects on the ceilings of the verandah, as indicated in the tabular columns in the appendix. These studies are typical of our scientific efforts in other parts of the paintings in the inner shrine, caves and the like.

Conclusion.

We would suggest that reflectance measurements are taken of the Sittannavasal paintings periodically and at convenient intervals, so as to keep a watch on the future, colour values of the paintings, which might change through a variety of causes and which need not be elaborated here. When future measurements are taken, it is advisable to prepare suitable grids. This colour valuation method may be extended to all the wall paintings in the Tamil Nadu for purposes of recording in their future District Gazetteers. These scientific studies might ultimately lead to similar ones in other parts of India and ultimately, in other parts of the world.

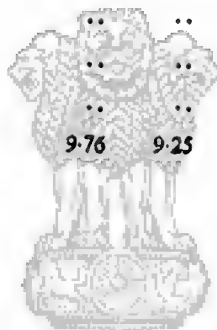
The scientific team for these investigations consisted of Dr. R. Ramaswamy, Assistant Director, Central Leather Research Institute, Madras and Dr. S. Paramasivan, under the direction of Dr. M. Santappa, Director of the Central Leather Research Institute'.

COLOUR VALUES OF THE SITTANNAVASAL PAINTINGS.

Subject parts of II.		With filters.		
		Red.	Green.	Blue.
(1)		(2)	(3)	(4)
1st Flower ..	1.	10.00	7.00	5.00
	2.	9.00	9.00	4.50
	3.	10.00	8.50	6.00
	4.	9.00	8.50	5.00
	5.	10.50	9.50	4.50
	6.	10.00	9.00	5.00
2nd Flower	1.	10.50	9.00	7.00
	2.	13.00	13.00	6.00
	3.	11.00	9.50	5.50
	4.	11.00	8.00	5.50
	5.	10.00	9.50	5.00
	6.	10.00	9.50	5.50

<i>Subject parts of it.</i>		<i>Tristimulus values.</i>					
		<i>X</i>	<i>Y</i>	<i>Z</i>	<i>R</i>	<i>G</i>	<i>B</i>
		(5)	(6)	(7)	(8)	(9)	(10)
1st Flower ..	1.	8.90	7.00	5.90	9.99	7.00	5.00
	2.	8.10	9.00	5.31	8.09	9.00	4.50
	3.	9.08	8.50	7.08	10.01	8.50	6.00
	4.	8.10	8.50	5.90	8.98	8.50	5.00
	5.	9.21	9.50	5.31	10.49	9.50	4.50
	6.	11.30	9.00	5.90	12.98	9.00	5.00
2nd Flower	1.	9.64	9.00	8.26	10.43	9.00	7.00
	2.	11.48	8.00	7.08	12.95	8.00	14.30
	3.	9.79	9.50	6.49	10.97	9.50	5.40
	4.	9.79	8.00	6.49	10.99	8.00	5.40
	5.	8.90	9.50	5.90	9.88	9.55	5.00
	6.	8.99	9.50	5.90	10.18	9.50	5.00

Subject parts of it.		Mean values+					
		X	Y	Z	R	G	B
		(11)	(12)	(13)	(14)	(15)	(16)
1st Flower ..	1.
	2.
	3.
	4.
	5.
	6.	9.12	8.60	5.89	10.09	8.68	5.00
2nd Flower	1.
	2.
	3.
	4.
	5.
	6.	9.76	9.25	6.69	10.09	9.25	5.06



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+ Mean values are introduced here for purposes of mathematical conveniences.

+ + The flowers and leaves relate to the lotus flowers and lotus leaves on the ceilings of the verandah to the east of the central right hand pillar. They are given in order from the eastern end.

COLOUR VALUES OF THE SITTANNAVASAL PAINTINGS.

Subject parts of it.		With filters.		
		Red.	Green.	Blue.
(1)		(2)	(3)	(4)
3rd Flower from western end.	By the side of 2nd.	(1) 11-00	10-00	4-50
		(2) 10-00	9-00	4-50
		(3) 10-00	9-50	4-00
		(4) 7-00	7-50	4-00
		(5) 8-50	8-00	5-50
		(6) 11-00	9-00	6-00
4th Flower from western end.	West of above.	(1) 20-05	20-00	9-50
		(2) 18-50	11-00	10-00
		(3) 17-00	10-00	10-00
		(4) 16-50	17-00	11-50
		(5) 21-50	21-00	8-00
		(6) 23-00	15-00	13-00
5th Flower from western end.	Next to above to west.	(1) 14-50	10-00	6-00
		(2) 11-50	14-00	5-50
		(3) 11-50	16-50	11-00
		(4) 12-50	11-00	7-50
		(5) 15-50	11-00	5-00
		(6) 17-50	11-50	6-00
6th Flower from western end.	West of above.	(1) 10-00	7-50	4-50
		(2) 30-00	14-50	9-00
		(3) 26-50	28-00	16-50
		(4) 31-00	26-00	12-00
		(5) 18-00	22-00	8-50
		(6) 27-00	11-00	8-50

Subject parts of it.		Tristimulus values.						
		X	Y	Z	R	G	B	
		(5)	(6)	(7)	(8)	(9)	(10)	
3rd Flower from western end.	By the side of 2nd.	(1)	9.61	10.00	5.31	10.00	10.00	4.50
		(2)	8.81	9.00	5.31	9.99	9.00	4.50
		(3)	8.72	9.50	4.72	10.03	9.50	4.00
		(4)	6.32	7.50	4.72	7.02	7.50	4.00
		(5)	7.79	8.00	6.49	8.47	8.00	5.40
		(6)	9.86	9.00	7.08	11.95	9.00	6.00
4th Flower from western end.	West of above	(1)	18.11	20.00	11.21	20.57	20.00	9.51
		(2)	16.60	11.00	11.80	17.84	11.00	10.01
		(3)	15.40	12.00	11.80	17.06	12.00	10.01
		(4)	15.27	17.00	13.57	16.54	17.00	11.51
		(5)	18.64	21.00	9.44	21.51	28.00	8.00
		(6)	20.02	15.00	11.80	23.06	15.00	10.01
5th Flower from western end.	Next to above to west.	(1)	12.68	10.00	7.08	14.46	10.00	6.00
		(2)	10.19	14.00	6.49	11.53	14.00	5.40
		(3)	11.18	16.50	12.98	11.53	16.50	11.01
		(4)	11.35	11.00	8.85	12.52	11.00	7.50
		(5)	13.30	11.00	5.90	15.53	11.00	5.00
		(6)	15.08	11.50	7.08	17.55	11.50	6.00
6th Flower from western end.	West of above.	(1)	8.81	7.53	5.31	9.99	7.53	4.50
		(2)	25.62	14.50	10.62	30.78	14.50	9.00
		(3)	26.32	28.00	19.47	30.12	28.00	16.51
		(4)	26.96	20.00	14.16	31.13	20.00	12.00
		(5)	15.93	22.00	10.03	17.95	22.00	8.50
		(6)	26.54	11.00	6.49	31.97	11.00	5.50

Subject parts of it.			Mean values.					
			X	Y	Z	R	G	B
			(11)	(12)	(13)	(14)	(15)	(16)
3rd Flower from western end.	By the side of 2nd.	(1)	..	..	..	..	..	..
		(2)	..	..	..	..	..	..
		(3)	..	..	..	..	..	..
		(4)	..	..	..	..	..	..
		(5)	..	..	..	..	..	..
		(6)	8.53	8.80	5.60	9.57	8.00	4.13
4th Flower from western end.	West of above.	(1)	..	..	..	..	..	..
		(2)	..	..	..	..	..	..
		(3)	..	..	..	..	..	..
		(4)	..	..	..	..	..	..
		(5)	..	..	..	..	..	..
		(6)	17.36	13.00	11.60	19.57	13.00	9.67
5th Flower from western end.	Next to above to west.	(1)	..	..	..	..	..	..
		(2)	..	..	..	..	..	..
		(3)	..	..	..	..	..	..
		(4)	..	..	..	..	..	..
		(5)	..	..	..	..	..	..
		(6)	12.24	12.10	8.06	13.85	12.1	6.8
6th Flower from western end.	West of above.	(1)	..	..	..	..	..	..
		(2)	..	..	..	..	..	..
		(3)	..	..	..	..	..	..
		(4)	..	..	..	..	..	..
		(5)	..	..	..	..	..	..
		(6)	27.78	17.10	10.18	25.30	17.10	9.3

Subject parts of it.			With filters.		
			Red.	Green.	Blue.
(1)	(2)	(3)	(4)	(5)	(6)
7th Folwer from eastern end.	Next to the above.	(1)	16.00	11.50	5.00
		(2)	12.00	11.00	5.90
		(3)	12.50	8.50	4.50
		(4)	9.50	9.00	5.00
		(5)	10.50	9.00	5.00
		(6)	10.00	8.50	3.50
1st Leaf from eastern end.		(1)	9.50	8.50	5.50
		(2)	6.50	9.50	4.50
		(3)	9.00	9.00	6.00
		(4)	6.50	9.50	6.00
		(5)	9.50	10.50	6.00
		(6)	12.00	11.50	6.50
2nd Leaf west of above.		(1)	12.00	10.50	8.50
		(2)	8.00	9.00	12.00
		(3)	7.00	8.50	5.00
		(4)	6.00	6.50	8.00
		(5)	6.50	7.00	4.50
		(6)	6.00	7.50	8.00
3rd Leaf west of above.		(1)	12.50	6.00	4.50
		(2)	8.00	7.25	4.50
		(3)	8.50	9.00	5.00
		(4)	9.00	7.50	5.00
		(5)	9.00	8.00	4.50
		(6)	9.50	6.50	4.50

Subject parts of is.			Tristimulus values.					
			X	Y	Z	R	G	B
			(5)	(6)	(7)	(8)	(9)	(10)
7th Flower from eastern end.	Next to the above.	(1)	13.70	11.50	5.90	16.08	11.50	5.00
		(2)	10.50	11.00	5.90	12.03	11.00	5.00
		(3)	10.81	8.50	5.31	12.49	8.50	4.50
		(4)	8.50	9.00	5.90	9.53	9.00	5.00
		(5)	9.30	5.00	5.90	10.53	9.00	5.00
		(6)	8.63	8.50	4.3	9.93	8.50	3.91
1st Leaf from eastern end.		(1)	8.50	9.15	6.05	9.55	15.00	5.13
		(2)	6.01	9.50	5.31	6.49	9.50	4.50
		(3)	8.28	9.00	7.08	9.00	9.00	6.03
		(4)	6.28	9.50	7.08	6.35	9.50	6.03
		(5)	8.68	10.05	7.08	9.35	10.50	6.03
		(6)	10.77	11.50	7.67	11.95	16.50	6.50
2nd Leaf west of above.		(1)	11.13	10.50	10.04	10.31	10.50	8.50
		(2)	8.56	9.00	14.16	8.00	9.00	12.00
		(3)	6.50	8.50	5.90	6.88	8.50	5.00
		(4)	6.24	6.50	9.44	5.97	6.50	8.00
		(5)	6.01	7.00	5.31	6.49	7.00	4.50
		(6)	10.24	7.50	9.44	6.97	7.50	8.00
3rd leaf west of above.		(1)	10.81	6.00	5.31	12.49	6.00	4.50
		(2)	7.21	6.00	5.31	7.99	6.00	4.50
		(3)	7.70	9.00	5.90	8.53	9.00	5.00
		(4)	8.10	7.50	5.90	8.98	7.50	5.00
		(5)	8.01	8.00	5.31	8.99	8.00	4.50
		(6)	8.41	6.50	5.31	9.49	6.50	4.50

Subject parts of it.			Mean values.					
			X	Y	Z	R	G	B
			(11)	(12)	(13)	(14)	(15)	(16)
7th Flower from eastern end.	Next to the above.	(1)	..	..	..	..	..	..
		(2)	..	..	..	..	..	..
		(3)	..	..	..	..	..	..
		(4)	..	..	..	..	..	..
		(5)	..	..	..	..	..	..
		(6)	11.96	11.16	6.60	13.05	11.10	5.64
1st Leaf from eastern end.		(1)	..	..	..	..	..	..
		(2)	..	..	..	..	..	..
		(3)	..	..	..	..	..	..
		(4)	..	..	..	..	..	..
		(5)	..	..	..	..	..	..
		(6)	8.10	10.80	6.71	8.78	10.80	5.70
2nd Leaf west of above.		(1)	..	..	..	..	..	..
		(2)	..	..	..	..	..	..
		(3)	..	..	..	..	..	..
		(4)	..	..	..	..	..	..
		(5)	..	..	..	..	..	..
		(6)	7.44	8.10	9.09	6.26	8.10	7.00
Leaf west of above.		(1)	..	..	..	..	..	..
		(2)	..	..	..	..	..	..
		(3)	..	..	..	..	..	..
		(4)	..	..	..	..	..	..
		(5)	..	..	..	..	..	..
		(6)	8.37	7.10	5.50	9.41	7.10	6.44

*Subject Parts of it.**With filters.*

		<i>Red.</i>	<i>Green.</i>	<i>Blue.</i>
(1)	(2)	(3)	(4)	
4th Leaf west of above.	(1)	30.50	25.00	22.50
	(2)	29.00	25.00	15.00
	(3)	33.00	34.00	19.50
	(4)	24.00	39.50	16.00
	(5)	29.50	32.50	15.50
	(6)	27.00	34.00	16.00
5th Leaf west of above.	(1)	8.50	9.50	6.50
	(2)	11.50	10.50	7.00
	(3)	7.00	10.00	6.50
	(4)	11.00	8.50	7.00
	(5)	10.50	10.00	6.00
	(6)	9.00	11.50	6.50
6th Leaf west of above.	(1)	12.00	13.00	4.5
	(2)	21.50	7.00	7.00
	(3)	18.00	8.50	15.00
	(4)	15.00	10.50	12.50
	(5)	10.00	9.00	9.00
	(6)	16.50	9.50	9.00
7th Leaf west of above.	(1)	6.00	10.00	6.00
	(2)	9.00	9.00	6.00
	(3)	8.50	10.00	6.00
	(4)	7.00	8.00	5.00
	(5)	7.00	8.50	5.00
	(6)	7.50	7.50	5.50

Subject parts of it.	Fristimulus values.						
	<i>K</i>	<i>Y</i>	<i>Z</i>	<i>R</i>	<i>G</i>	<i>B</i>	
	(5)	(6)	(7)	(8)	(9)	(10)	
4th Leaf west of above.	(1)	28.45	25.00	26.35	32.05	25.00	22.51
	(2)	25.90	25.00	17.70	28.86	25.00	15.01
	(3)	29.91	34.00	23.01	32.88	34.00	19.51
	(4)	22.08	39.50	15.88	24.60	39.50	13.47
	(5)	26.39	32.50	18.29	29.53	32.50	15.51
	(6)	24.48	34.00	18.88	26.86	34.00	16.02
5th Leaf west of above.	(1)	7.97	9.50	7.67	8.50	9.50	6.49
	(2)	10.46	10.50	8.26	11.43	10.50	7.00
	(3)	6.77	10.00	7.67	7.00	10.00	7.64
	(4)	10.06	8.5	8.26	11.33	8.50	7.00
	(5)	9.48	10.00	7.08	10.45	10.00	6.00
	(6)	8.37	11.50	7.67	9.00	11.50	6.50
6th Leaf west of above.	(1)	10.41	13.00	5.31	13.24	13.00	4.50
	(2)	18.48	7.00	8.26	21.45	7.00	7.00
	(3)	12.10	8.50	17.70	18.04	8.50	15.02
	(4)	14.25	10.50	14.75	15.00	10.50	12.51
	(5)	9.62	9.00	10.62	10.05	9.00	9.05
	(6)	14.82	9.50	10.62	16.55	9.50	9.05
7th Leaf west of above.	(1)	8.77	10.00	5.90	5.98	10.00	5.00
	(2)	8.46	9.00	7.08	9.25	9.00	6.00
	(3)	7.88	10.00	7.08	8.45	10.00	6.00
	(4)	7.70	8.00	5.90	8.48	8.00	5.00
	(5)	6.50	8.50	5.90	6.98	8.50	5.00
	(6)	6.97	7.50	6.49	7.52	7.50	5.50

Subject parts of it.	Mean values.					
	X	Y	Z	R	G	B
	(11)	(12)	(13)	(14)	(15)	(16)
4th Leaf west of above.	(1)	..	..	..	..	..
	(2)	..	..	..	..	..
	(3)	..	..	..	..	..
	(4)	..	..	..	..	..
	(5)	..	..	..	..	..
	(6)	26.02	31.06	20.60	29.16	31.16
5th Leaf west of above.	(1)	..	..	..	..	..
	(2)	..	..	..	..	..
	(3)	..	..	..	..	..
	(4)	..	..	..	..	..
	(5)	..	..	..	..	..
	(6)	8.83	10.00	7.73	9.62	10.00
6th Leaf west of above.	(1)	..	..	..	..	..
	(2)	..	..	..	..	..
	(3)	..	..	..	..	..
	(4)	..	..	..	..	..
	(5)	..	..	..	..	..
	(6)	14.16	9.60	11.21	15.72	9.60
7th Leaf west of above.	(1)	..	..	..	..	..
	(2)	..	..	..	..	..
	(3)	..	..	..	..	..
	(4)	..	..	..	..	..
	(5)	..	..	..	..	..
	(6)	7.20	8.83	9.39	7.77	8.83

<i>Subject parts of it.</i>			<i>With filters.</i>		
			<i>Red.</i>	<i>Green.</i>	<i>Blue.</i>
(1)		(2)	(3)	(4)	
Human figure extreme right.	Crown	(1)	7.50	12.00	7.00
		(2)	8.00	6.00	6.00
		(3)	8.00	8.50	6.50
		(4)	8.50	5.50	5.50
		(5)	11.00	6.50	7.00
		(6)	5.50	6.50	4.50
Human figure extreme right.	Head	(1)	14.50	12.00	7.50
		(2)	9.00	9.50	6.50
		(3)	21.00	9.00	7.50
		(4)	12.00	11.50	7.50
		(5)	14.00	10.50	8.00
		(6)	14.50	12.50	12.50
Human figure extreme right.	Arms	(1)	14.50	14.50	13.00
		(2)	13.00	13.00	7.00
		(3)	13.00	13.00	9.00
		(4)	14.00	9.00	7.00
		(5)	13.00	7.50	11.50
		(6)	13.50	11.00	7.00
Human figure extreme right.	Body	(1)	11.00	11.00	6.50
		(2)	12.00	12.00	7.00
		(3)	12.50	10.50	6.50
		(4)	11.00	10.00	8.50
		(5)	14.00	12.00	6.50
		(6)	15.00	13.00	6.00

Subject parts of it.			Tristimulus values.					
			X	Y	Z	R	G	B
			(5)	(6)	(7)	(8)	(9)	(10)
Human figure extreme right.	Crown	(1)	7.26	5.00	8.26	7.48	5.00	9.00
		(2)	7.18	6.00	7.08	8.03	6.00	6.00
		(3)	7.39	6.50	6.49	7.97	6.50	5.50
		(4)	7.79	5.50	6.49	7.47	5.50	4.67
		(5)	10.06	6.50	8.26	10.94	6.50	5.00
		(6)	5.21	6.50	5.31	5.49	6.50	4.50
Human figure extreme right.	Head	(1)	12.95	12.00	8.85	14.52	12.00	7.50
		(2)	8.37	9.57	7.67	9.05	9.50	6.50
		(3)	18.50	9.00	8.95	21.42	9.00	7.50
		(4)	10.95	11.50	8.85	12.02	11.50	7.50
		(5)	13.04	10.50	9.44	14.45	10.50	8.00
		(6)	13.85	12.50	14.75	14.50	12.50	12.50
Human figure extreme right.	Arms	(1)	13.94	14.50	15.34	14.50	14.50	13.02
		(2)	11.66	13.00	8.26	12.93	13.00	7.00
		(3)	12.02	13.00	10.62	12.98	13.13	9.02
		(4)	12.46	9.00	8.26	13.93	9.00	7.00
		(5)	11.75	11.50	8.85	13.02	11.50	7.50
		(6)	13.66	11.00	8.36	15.53	11.00	7.10
Human figure extreme right.	Body	(1)	9.97	11.00	7.67	10.95	11.00	6.40
		(2)	10.86	12.00	8.26	12.03	12.00	6.49
		(3)	11.17	10.50	7.67	12.50	10.50	6.49
		(4)	10.33	10.00	10.03	10.95	10.00	8.50
		(5)	12.37	12.00	7.67	13.95	12.00	6.49
		(6)	7.67	13.00	7.08	8.15	13.00	5.98

Subject parts of ..		Mean values.					
		Y	L	R	G	B	
		(11)	(12)	(13)	(14)	(15)	(16)
Human figure extreme right.	Crown	(1)	..	..	..	..	..
		(2)	..	..	..	..	..
		(3)	..	..	..	..	..
		(4)	..	..	..	..	..
		(5)	..	..	..	..	..
		(6)	7.53	6.00	6.98	7.89	6.00 6.10
Human figure extreme right.	Head	(1)	..	..	..	..	..
		(2)	..	..	..	..	..
		(3)	..	..	..	..	..
		(4)	..	..	..	..	..
		(5)	..	..	..	..	..
		(6)	12.94	10.80	9.73	14.34	10.80 8.20
Human figure extreme right.	Arms	(1)	..	..	..	..	..
		(2)	..	..	..	..	..
		(3)	..	..	..	..	..
		(4)	..	..	..	..	..
		(5)	..	..	..	..	..
		(6)	12.58	12.00	9.93	13.81	12.00 8.4
Human figure extreme right.	Body	(1)	..	..	..	..	..
		(2)	..	..	..	..	..
		(3)	..	..	..	..	..
		(4)	..	..	..	..	..
		(5)	..	..	..	..	..
		(6)	10.39	11.41	8.06	11.42	11.40 6.82

<i>Subject Parts of it.</i>			<i>With Filters.</i>		
			<i>Red.</i>	<i>Green.</i>	<i>Blue.</i>
(1)	(2)	(3)	(4)	(5)	
Human Figure (Vide above).	Legs	(1)	16.00	10.50	7.50
		(2)	11.00	10.00	7.00
		(3)	11.50	10.50	6.50
		(4)	13.00	16.00	5.50
		(5)	14.65	13.00	6.50
		(6)	15.50	14.50	7.00
Human Figure (Yellowish)	Crown	(1)	6.00	6.50	5.00
		(2)	4.50	5.50	4.50
		(3)	5.00	6.00	4.50
		(4)	4.00	6.50	9.00
		(5)	2.50	8.50	5.00
		(6)	4.00	7.00	5.50
	Head	(1)	10.00	10.50	7.00
		(2)	10.50	12.00	6.50
		(3)	12.00	11.50	6.50
		(4)	15.00	7.50	6.00
		(5)	11.00	9.50	6.00
		(6)	12.00	10.50	6.50
	Arms	(1)	22.00	10.50	6.00
		(2)	10.00	8.50	9.00
		(3)	17.00	9.00	8.50
		(4)	19.00	15.00	8.00
		(5)	16.00	12.50	7.00
		(6)	13.50	14.00	6.00

Subject Parts of it.			Tristimulus Values.					
			X	Y	Z	Red.	Green.	Blue.
(1)	(2)		(6)	(7)	(8)	(9)	(10)	(11)
Human Figure (Vide above)	Legs	(1)	14.15	10.50	8.85	15.92	10.50	7.49
		(2)	10.06	10.00	8.26	11.33	10.00	7.00
		(3)	23.67	10.50	7.67	28.05	10.50	6.49
		(4)	11.57	16.00	7.67	13.00	16.00	6.49
		(5)	12.19	13.00	6.19	14.07	13.00	5.25
		(6)	13.61	14.50	7.96	15.48	14.50	6.75
Human Figure (Yellowish)	Crown	(1)	5.70	6.50	5.90	6.01	6.50	5.00
		(2)	4.41	5.50	5.31	4.49	5.50	4.50
		(3)	4.81	6.00	5.31	4.99	6.00	4.50
		(4)	4.80	6.50	10.62	3.99	6.50	9.07
		(5)	2.90	8.50	5.90	1.08	8.50	5.00
		(6)	4.19	7.00	6.49	3.97	7.00	5.57
	Head	(1)	9.26	10.50	8.26	9.98	10.25	6.41
		(2)	9.57	12.00	7.67	10.50	12.00	6.50
		(3)	10.77	11.50	7.67	12.05	11.50	6.50
		(4)	18.08	7.50	7.08	14.90	7.50	6.00
		(5)	9.88	9.55	7.08	10.93	9.50	6.00
		(6)	10.77	10.50	7.67	11.95	10.50	6.45
Arms	(1)	18.60	10.50	7.08	21.85	10.50	6.00	
	(2)	9.62	8.50	10.62	9.99	8.50	9.05	
	(3)	15.60	9.00	10.03	17.20	9.00	8.50	
	(4)	16.64	15.00	9.44	18.36	15.00	8.00	
	(5)	14.06	12.50	8.26	15.93	12.50	7.00	
	(6)	11.80	14.00	7.08	13.45	14.00	6.00	

COLOUR VALUES OF THE SITTANNAVASAL PAINTINGS.

Subject to Parts of it.			Mean values.					
(1)	(2)		X	Y	Z	Red.	Green.	Blue.
			(12)	(13)	(14)	(15)	(16)	(17)
Human Figure (Vide above)	Legs	(1)	..	..	..	..	..	..
		(2)	..	..	..	..	..	..
		(3)	..	..	..	..	..	..
		(4)	..	..	..	..	..	..
		(5)	..	..	..	..	..	..
		(6)	14.21	12.40	8.76	19.14	12.40	6.53
Human Figure (Yellowish)	Crown	(1)	..	..	..	..	..	..
		(2)	..	..	..	..	..	..
		(3)	..	..	..	..	..	..
		(4)	..	..	..	..	..	..
		(5)	..	..	..	..	..	..
		(6)	4.47	6.66	6.59	4.09	6.50	5.60
	Head	(1)	..	..	..	..	..	..
		(2)	..	..	..	..	..	..
		(3)	..	..	..	..	..	..
		(4)	..	..	..	..	..	..
		(5)	..	..	..	..	..	..
		(6)	10.22	10.35	7.57	11.70	10.25	6.4
Arms	(1)	..	..	..	..	..	..
	(2)	..	..	..	..	..	..
	(3)	..	..	..	..	..	..
	(4)	..	..	..	..	..	..
	(5)	..	..	..	..	..	..
	(6)	14.41	11.60	8.75	11.55	10.35	6.41	

Subject Parts of it.		With Filters.			
		Red.	Green.	Blue.	
(1)	(2)	(3)	(4)	(5)	
Human Figure — vide above.	Body	(1)	16.50	9.50	6.50
		(2)	18.00	17.00	10.50
		(3)	15.50	15.50	10.50
		(4)	12.00	9.00	7.00
		(5)	19.50	14.50	11.00
		(6)	11.00	13.50	6.00
Human Figure (Reddish).	Crown	(1)	10.50	7.50	6.00
		(2)	7.50	6.00	7.00
		(3)	8.50	5.50	6.00
		(4)	9.00	6.00	6.00
		(5)	11.00	6.00	6.50
		(6)	8.50	6.00	8.50
	Head	(1)	8.50	7.00	6.50
		(2)	10.50	9.50	11.50
		(3)	10.00	8.00	6.00
		(4)	8.00	7.50	6.50
		(5)	8.50	7.00	6.60
		(6)	8.00	7.00	7.50
	Arms	(1)	11.00	8.00	6.50
		(2)	10.00	8.00	6.50
		(3)	14.50	10.00	7.50
		(4)	14.00	6.50	6.50
		(5)	15.00	8.00	7.00
		(6)	11.50	13.50	9.00

COLOUR VALUES OF THE SITTANNAVASAL PAINTINGS.

*Subject Parts of It.**Tristimulus Values.*

			<i>X</i>	<i>Y</i>	<i>Z</i>	<i>Red.</i>	<i>Green.</i>	<i>Blue.</i>
(1)	(2)		(6)	(7)	(8)	(9)	(10)	(11)
Human Figure <i>vide</i> above.	Body	(1)	14.37	9.50	7.67	16.55	9.50	6.30
		(2)	16.29	17.00	12.39	17.97	17.00	10.8
		(3)	14.29	15.50	12.39	15.47	15.50	10.80
		(4)	10.86	9.00	8.26	11.93	9.00	7.04
		(5)	17.58	14.50	12.18	19.44	14.50	11.01
		(6)	13.50	9.88	13.50	7.08	11.00	6.00
Huma Figure (Reddish).	Crown	(1)	9.48	7.50	7.08	10.45	7.50	6.00
		(2)	7.26	6.00	8.26	7.48	6.00	7.04
		(3)	7.88	5.50	7.08	8.38	5.50	6.00
		(4)	8.28	6.00	7.08	8.95	6.00	6.50
		(5)	9.94	6.00	7.67	10.99	6.00	6.50
		(6)	7.79	6.00	6.49	8.47	6.00	5.41
	Head	(1)	7.97	7.00	7.67	8.55	7.00	6.50
		(2)	10.47	9.00	13.57	10.44	9.00	11.51
		(3)	9.08	8.00	7.08	10.00	8.00	6.00
		(4)	7.57	7.50	7.67	8.00	7.50	6.50
		(5)	7.97	7.00	6.67	8.55	7.00	6.50
		(6)	8.55	7.00	8.55	8.02	7.00	7.50
	Arms	(1)	9.97	8.00	7.67	11.05	8.00	6.50
		(2)	9.17	8.00	7.67	10.00	8.00	6.50
		(3)	12.95	10.00	8.85	14.52	10.00	7.50
		(4)	12.37	6.50	7.67	13.85	6.50	6.50
		(5)	13.26	8.00	8.26	14.93	8.00	7.40
		(6)	10.82	13.50	10.62	11.48	13.50	9.00

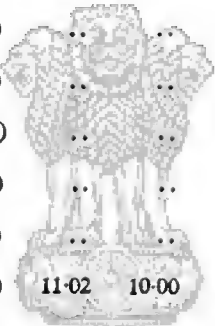
Subject Parts of II.		Mean Values.					
(1)	(2)	X (12)	Y (13)	Z (14)	Red. (15)	Green. (16)	Blue. (17)
Human Figure— vide above.	Body	(1)	..	..	..	..	..
		(2)	..	..	..	..	..
		(3)	..	..	..	..	..
		(4)	..	..	..	..	..
		(5)	..	..	..	..	..
		(6)	13.88	13.10	10.29	17.06	13.10	8.50
Human Figure (Reddish).	Crown	(1)	..	..	..	..	..
		(2)	..	..	..	..	..
		(3)	..	..	..	..	..
		(4)	..	..	..	..	..
		(5)	..	..	..	..	..
		(6)	3.44	6.10	7.25	9.12	6.10	6.16
	Head	(1)	..	..	..	..	..
		(2)	..	..	..	..	..
		(3)	..	..	..	..	..
		(4)	..	..	..	..	..
		(5)	..	..	..	..	..
		(6)	8.60	7.60	8.75	8.92	7.60	6.75
	Arms	(1)	..	..	..	..	..
		
		(3)	..	..	..	..	..
		(4)	..	..	..	..	..
		(5)	..	..	..	..	..
		(6)	11.42	9.00	3.47	12.64	9.00	17.1

COLOUR VALUES OF THE SITTANNAVASAL PAINTINGS

<i>Subject Parts of it</i>		<i>With filters.</i>		
		<i>Red.</i>	<i>Green.</i>	<i>Blue.</i>
(1)	(2)	(3)	(4)	(5)
Human	Body	(1) 26-00	6-00	6-00
Figure		(2) 15-00	8-00	17-00
(Reddish)		(3) 10-05	7-00	20-50
cont.		(4) 14-00	8-00	9-50
		(5) 13-00	9-00	9-00
		(6) 14-00	7-00	16-00
Do.	Thigh	(1) 11-00	18-00	6-50
		(2) 17-00	9-00	6-50
		(3) 11-00	8-50	6-50
		(4) 11-50	9-00	7-00
		(5) 16-00	7-00	6-50
		(6) 9-00	8-50	6-00
Elephant		(1) 29-00	18-00	9-00
hidden by		(2) 33-50	19-00	11-00
lotus		(3) 24-00	25-00	17-00
leaves		(4) 17-00	1-00	7-00
Details		(5) 18-00	12-00	15-00
Not clear		(6) 16-50	9-00	7-00
		(7) 13-00	8-00	15-00
Measurement		(8) 12-00	11-00	11-00
over the whole		(9) 20-00	16-00	13-00
area in general)		(10) 13-50	27-60	22-50
		(11) 16-50	35-00	18-00
		(12) 16-00	16-00	14-50

Subject Parts of it.		Tristimulus Values.						
			X	Y	Z	Red.	Green	Blue.
(1)	(2)		(6)	(7)	(8)	(9)	(10)	(11)
Human Figure (Reddish) <i>sonid.</i>	Body	(1)	20.88	6.00	7.08	25.95	6.00	6.00
		(2)	15.06	8.00	20.06	14.90	8.00	17.50
		(3)	12.09	7.00	24.19	10.50	7.00	20.51
		(4)	12.91	8.00	11.21	13.88	8.00	9.51
		(5)	12.02	9.00	10.62	12.99	9.00	9.00
		(6)	14.08	7.00	18.88	13.92	7.00	16.02
Do.	Thigh	(1)	9.96	18.00	7.67	11.01	18.00	6.50
		(2)	14.77	9.00	7.67	17.01	9.00	6.50
		(3)	9.97	8.50	7.67	11.01	8.50	6.50
		(4)	10.16	9.00	8.26	11.13	9.00	7.04
		(5)	13.97	7.00	7.67	15.95	7.00	6.50
		(6)	8.28	8.50	7.08	9.10	6.50	6.00
Elephant hidden by lotus leaves . Details Not clear (Measurement over the whole area in general).		(1)	24.82	18.00	10.62	29.65	18.18	9.60
		(2)	25.78	19.00	12.98	33.34	19.00	11.01
		(3)	22.26	25.00	20.06	7.39	25.00	17.50
		(4)	14.86	11.00	8.26	16.99	11.00	7.04
		(5)	17.10	12.00	17.70	18.05	12.00	15.01
		(6)	14.46	9.00	8.26	16.94	9.00	7.04
		(7)	11.93	15.00	10.03	13.10	15.00	8.50
		(8)	11.58	11.00	12.98	12.04	11.00	11.01
		(9)	18.34	16.00	15.34	19.70	16.00	13.01
		(10)	14.49	27.00	24.19	13.40	27.00	20.51
		(11)	16.44	35.00	21.24	16.30	35.00	18.01
		(12)	15.41	16.00	17.11	14.06	16.00	14.51

COLOUR VALUES OF THE SITTANNAVASAL PAINTINGS.

Subject Parts of it.		Mean Values.						
			X	Y	Z	Red.	Green.	Blue.
(1)	(2)		(12)	(13)	(14)	(15)	(16)	(17)
Human Figure (Reddish)	Body	(1)	..	..	..	..	..	..
		(2)	..	..	..	..	..	..
		(3)	..	..	..	..	..	..
		(4)	..	..	..	..	..	..
		(5)	..	..	..	..	..	..
		(6)	14.87	7.50	15.34	15.35	7.50	13.
Do.	Thigh	(1)	..	..	..	..	..	..
		(2)	..	..	..	..	..	..
		(3)	..	..	..	..	..	..
		(4)	..	..	..	..	..	..
		(5)	..	..	..	..	..	..
		(6)	11.02	10.00	7.67	12.20	10.00	6.34
								
सत्यमेव जयते								
Elephant hidden by lotus leaves Details Not clear		(1)	..	..	..	..	..	..
		(2)	..	..	..	..	..	..
		(3)	..	..	..	..	..	..
		(4)	..	..	..	..	..	..
		(5)	..	..	..	..	..	..
		(6)	..	..	..	..	..	..
Measurement over the whole area in general).		(7)	..	..	..	..	..	..
		(8)	..	..	..	..	..	..
		(9)	..	..	..	..	..	..
		(10)	..	..	..	..	..	..
		(11)	..	..	..	..	..	..
		(12)	17.54	16.10	14.90	19.00	16.10	12.67

<i>Subject Parts of it.</i>			<i>With Filters.</i>		
			<i>Red.</i>	<i>Green.</i>	<i>Blue.</i>
(1)	(2)	(3)	(4)	(5)	
Elephant Centrally situated	(Yellow)	(1)	12-50	10-50	9-50
		(2)	13-00	11-00	8-50
		(3)	18-00	9-60	12-00
		(4)	12-00	10-00	11-60
		(5)	16-00	10-00	5-00
		(6)	18-50	12-00	5-50
		(7)	17-00	12-50	6-00
		(8)	12-50	10-50	20-00
		(9)	12-00	30-50	9-00
		(10)	15-50	12-50	7-00
		(11)	15-50	12-50	11-00
		(12)	11-00	11-50	11-50
Elephant	(Red)	(1)	11-00	11-50	10-00
		(2)	15-50	11-50	7-50
		(3)	6-00	22-78	13-00
		(4)	12-00	12-50	5-00
		(5)	11-00	14-50	7-50
		(6)	10-50	17-50	5-50
		(7)	6-50	11-00	5-50
		(8)	8-50	13-00	7-50
		(9)	11-00	26-00	5-50
		(10)	15-00	5-00	6-00
		(11)	13-00	20-00	7-50
		(12)	18-00	9-00	6-00

COLOUR VALUES OF THE SITTANNAVASAL PAINTING.

Subject Parts of it.		Tristimulus Values.						
			X	Y	Z	Red.	Green.	Blue.
(1)	(2)	(6)	(7)	(8)	(9)	(10)	(11)	
Elephant	(Yellow) Centrally situated	(1)	11.71	10.50	12.10	12.51	10.50	10.26
		(2)	11.57	11.00	10.03	12.60	11.00	18.51
		(3)	16.56	9.50	14.16	17.93	9.50	12.03
		(4)	11.67	10.00	13.57	11.95	10.00	11.51
		(5)	13.70	10.00	5.90	18.48	10.00	5.00
		(6)	15.79	12.00	6.49	18.42	12.00	5.55
		(7)	14.68	12.50	7.08	17.05	12.50	6.00
		(8)	11.89	20.00	12.39	12.57	20.00	10.51
		(9)	11.22	30.50	10.62	11.99	30.50	9.00
		(10)	14.46	12.50	8.26	16.43	12.50	11.03
		(11)	15.18	12.50	12.98	16.38	12.50	11.03
		(12)	10.87	11.50	13.57	11.02	11.50	11.51
Elephant	(Red)	(1)	10.60	11.50	11.80	10.99	11.50	10.00
		(2)	13.75	11.50	8.85	10.52	11.50	7.50
		(3)	22.78	13.00	12.98	25.73	13.00	11.00
		(4)	10.50	12.50	5.90	11.98	12.50	5.00
		(5)	10.15	14.50	8.85	11.07	14.50	7.60
		(6)	9.39	17.50	6.49	10.47	17.50	5.45
		(7)	6.19	11.00	6.49	6.47	11.00	5.45
		(8)	8.15	13.00	8.85	8.52	13.00	7.50
		(9)	9.79	26.00	6.49	10.97	26.00	5.60
		(10)	14.28	9.00	7.08	6.55	9.00	6.00
		(11)	11.75	20.00	8.85	13.02	20.00	7.50
		(12)	15.48	9.00	7.08	17.65	9.00	6.00

Subject Parts of it.			Mean Values.					
			X	Y	Z	Red.	Green.	Blue.
(1)	(2)		(12)	(13)	(14)	(15)	(16)	(17)
Elephant Centrall situated.	(Yellow)	(1)	..	..	..	..	..	..
		(2)	..	..	..	..	..	..
		(3)	..	..	..	..	..	..
		(4)	..	..	..	..	..	..
		(5)	..	..	..	..	..	..
		(6)	..	..	..	..	..	..
		(7)	..	..	..	..	..	..
		(8)	..	..	..	..	..	..
		(9)	..	..	..	..	..	..
		(10)	..	..	..	..	..	..
		(11)	..	..	..	..	..	..
		(12)	13.30	12.70	10.50	15.00	12.70	9.00
Elephant	(Red)	(1)	..	..	..	..	..	..
		(2)	..	..	..	..	..	..
		(3)	..	..	..	..	..	..
		(4)	..	..	..	..	..	..
		(5)	..	..	..	..	..	..
		(6)	..	..	..	..	..	..
		(7)	..	..	..	..	..	..
		(8)	..	..	..	..	..	..
		(9)	..	..	..	..	..	..
		(10)	..	..	..	..	..	..
		(11)	..	..	..	..	..	..
		(12)	11.90	14.04	8.30	13.25	14.04	5.80

COLOUR VALUES OF THE SITTANNAVASAL PAINTINGS.

<i>Subject Parts of it.</i>		<i>With Filters.</i>		
		<i>Red.</i>	<i>Green.</i>	<i>Blue.</i>
(1)	(2)	(3)	(4)	(5)
Twin Geese on western- most end.	(1)	12-00	11-00	8-00
	(2)	11-00	10-00	6-50
	(3)	11-00	9-00	8-00
	(4)	11-00	10-50	7-00
	(5)	9-50	15-00	3-50
	(6)	10-35	8-63	3-50
	(7)	10-00	7-50	5-50
	(8)	8-00	8-00	4-00
	(9)	7-00	9-50	7-00
	(10)	7-50	8-00	3-00
	(11)	9-50	9-00	5-50
2nd Geese- north of above	(1)	8-50	9-00	6-50
	(2)	10-50	9-00	7-00
	(3)	11-50	8-00	6-00
	(4)	8-00	8-50	7-00
	(5)	9-50	8-50	6-00
	(6)	10-50	8-00	6-50
	(7)	9-50	8-00	5-00
	(8)	9-50	5-50	2-50
	(9)	10-00	11-50	4-50
	(10)	9-00	7-50	5-50
	(11)	9-50	6-00	3-00
	(12)	10-00	8-50	4-00

Subject Parts of it.	(1)	Tristimulus Values.					
		X	Y	Z	Red.	Green.	Blue.
		(6)	(7)	(8)	(9)	(10)	(11)
Twin Geese on western- most end.	(1)	11.84	11.00	9.44	11.96	11.00	8.00
	(2)	9.87	10.00	7.67	11.04	10.00	6.50
	(3)	10.24	9.00	9.44	10.96	9.00	8.00
	(4)	10.06	10.50	8.26	10.93	10.50	7.00
	(5)	8.23	15.00	4.13	9.52	15.00	3.50
	(6)	8.63	8.00	4.13	2.93	8.00	3.50
	(7)	8.99	7.50	6.49	9.97	7.50	5.50
	(8)	7.12	8.00	4.52	7.39	8.00	3.84
	(9)	6.86	9.50	8.26	6.98	9.50	7.00
	(10)	6.54	8.00	3.54	7.52	9.00	3.01
	(11)	8.59	9.00	6.49	9.47	9.00	5.50
2nd Geese- north of above.	(1)	7.97	9.00	7.67	8.54	9.00	6.50
	(2)	9.66	9.00	8.26	10.43	9.00	7.00
	(3)	10.28	8.00	7.08	11.45	8.00	6.00
	(4)	7.16	8.50	8.26	7.38	8.50	7.00
	(5)	8.68	8.50	7.08	9.50	8.50	6.00
	(6)	9.48	8.00	7.08	10.60	8.00	6.00
	(7)	8.50	8.00	5.90	8.53	8.00	5.00
	(8)	8.05	5.50	29.50	4.40	5.50	2.50
	(9)	8.81	11.50	5.31	9.99	11.50	4.50
	(10)	8.19	7.50	6.49	8.92	7.50	5.50
	(11)	8.40	6.00	3.54	10.48	6.00	3.00
	(12)	8.72	8.50	4.72	10.00	8.50	4.00

COLOUR VALUES OF THE SITTANNAVASAL PAINTING.

Subject Parts of It.		Mean values. ±					
(1)	(2)	X	Y	Z	Red.	Green.	Blue.
		(12)	(13)	(14)	(15)	(16)	(17)
Twin Geese on western- most end.	(1)	..	..	..	..	..	..
	(2)	..	..	..	..	..	..
	(3)	..	..	..	..	..	..
	(4)	..	..	..	..	..	..
	(5)	..	..	..	..	..	..
	(6)	8.84	17.60	12.08	17.61	17.60	20.06
	(7)	..	..	..	..	..	..
	(8)	..	..	..	..	..	..
	(9)	..	..	..	..	..	..
	(10)	..	..	..	..	..	..
	(11)	..	..	..	..	..	..
2nd Geese north of above.	(1)	..	..	..	..	..	..
	(2)	..	..	..	..	..	..
	(3)	..	..	..	..	..	..
	(4)	..	..	..	..	..	..
	(5)	..	..	..	..	..	..
	(6)	..	..	..	..	..	..
	(7)	..	..	..	..	..	..
	(8)	..	..	..	..	..	..
	(9)	..	..	..	..	..	..
	(10)	..	..	..	..	..	..
	(11)	..	..	..	..	..	..
	(12)	17.27	16.30	16.81	18.07	16.50	20.06

<i>Subject Parts of it.</i>		<i>With Filters.</i>		
		<i>Red.</i>	<i>Green.</i>	<i>Blue.</i>
(1)	(2)	(3)	(4)	(5)
3rd Geese next to above.	(1)	16-50	10-00	17-00
	(2)	11-50	17-50	16-00
	(3)	10-50	17-50	17-50
	(4)	20-50	16-00	23-00
	(5)	15-50	12-50	9-50
	(6)	24-00	11-00	20-00
	(7)	12-50	25-00	11-00
	(8)	31-50	18-00	22-00
	(9)	25-50	14-00	21-50
	(10)	29-00	31-00	29-00
	(11)	15-00	27-00	28-00
	(12)	10-00	20-00	20-00
Twin Geese by the side of above.	(1)	19-00	19-00	14-50
	(2)	13-00	15-00	12-00
	(3)	9-50	11-00	6-00
	(4)	17-50	13-00	9-50
	(5)	17-50	14-50	10-00
	(6)	13-50	13-50	13-00
	(7)	13-00	14-50	12-50
	(8)	12-00	9-50	3-50
	(9)	13-00	14-00	6-50
	(10)	10-50	17-00	3-50
	(11)	20-00	13-00	6-50
	(12)	17-00	11-50	6-00

COLOUR VALUES OF THE SITTANNAVASAL PAINTING.

<i>Subject Parts of it.</i>		<i>Tristimulus values.</i>					
		<i>X</i>	<i>Y</i>	<i>Z</i>	<i>Red.</i>	<i>Green.</i>	<i>Blue.</i>
(1)	(2)	(6)	(7)	(8)	(9)	(10)	(11)
3rd Goose	(1)	16.26	10.00	20.06	16.51	10.00	17.50
next to	(2)	12.06	17.50	18.88	13.44	17.50	16.00
above	(3)	11.55	17.50	20.65	11.70	17.50	17.55
	(4)	20.54	16.00	27.14	21.45	16.00	23.10
	(5)	11.11	12.50	11.21	11.88	12.50	9.50
	(6)	22.80	11.00	23.60	24.02	11.00	21.70
	(7)	11.98	25.00	12.98	12.54	25.00	11.00
	(8)	29.16	18.00	25.96	31.40	18.00	22.00
	(9)	24.27	14.00	25.37	25.30	14.00	21.60
	(10)	28.42	31.00	34.22	29.00	31.00	29.00
	(11)	17.04	27.00	33.04	15.05	27.00	28.00
	(12)	11.60	20.00	23.60	10.02	20.00	19.50
Twin Geese	(1)	17.81	19.00	17.11	18.96	19.00	14.50
by the side	(2)	12.56	15.00	14.16	12.97	15.00	12.00
of above.	(3)	8.68	11.00	7.08	8.45	11.00	6.00
	(4)	15.11	13.00	11.21	17.47	13.00	9.55
	(5)	15.80	14.50	11.80	17.42	14.50	10.00
	(6)	13.14	13.50	15.34	13.45	13.50	13.00
	(7)	12.65	14.50	14.75	13.00	14.50	12.50
	(8)	15.90	9.50	4.13	19.12	9.50	3.50
	(9)	11.57	14.00	7.67	13.08	14.00	6.50
	(10)	9.03	17.00	4.13	10.62	17.00	3.50
	(11)	17.17	13.00	7.67	19.95	13.00	6.50
	(12)	14.68	11.50	11.08	16.95	11.50	6.00

Subject Parts of It.		Mean Values.					
		<i>X</i>	<i>Y</i>	<i>Z</i>	<i>Red.</i>	<i>Green.</i>	<i>Blue.</i>
(1)	(2)	(12)	(13)	(14)	(15)	(16)	(17)
3rd Geese next to above.	(1)	..	..	..	..	..	..
	(2)	..	..	..	..	..	..
	(3)	..	..	..	..	..	..
	(4)	..	..	..	..	..	..
	(5)	..	..	..	..	..	..
	(6)	..	..	..	..	..	..
	(7)	..	..	..	..	..	..
	(8)	..	..	..	..	..	..
	(9)	..	..	..	..	..	..
	(10)	..	..	..	..	..	..
	(11)	..	..	..	..	..	..
	(12)	18.10	18.20	23.06	18.52	18.20	19.80
Twin Geese by the side of above.	(1)
	(2)
	(3)
	(4)
	(5)
	(6)
	(7)
	(8)
	(9)
	(10)
	(11)
	(12)	27.40	27.50	20.37	30.23	27.60	17.26

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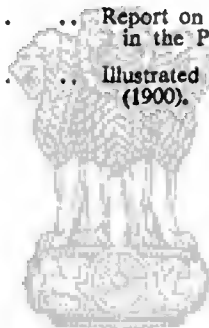
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सत्यमेव जयते

GLOSSARY.

The words included in the Glossary are in vogue in the Pudukkottai district, just as in the other districts of Tamil Nadu. Some of them are derivations from Sanskrit and some are Tamil.

Abhishekham	..	..	..	..	Anointment ; ceremonial bathing.
Alvars	.	..	..	..	The twelve ancient propagators of Vaishnavism.
Amaram	..	..	..	..	A grant of land by a chieftain on condition of military service ; Command of one thousand footmen.
Amavasai	..	..	..	..	New-moon day.
Bhakti	..	..	..	..	Devotion, especially religious devotion.
Bhoodan	.	..	..	..	Gift of land.
Brahmadeya (land)	..	..	..	..	Lands held by brahmins free of assessment.
Chekku	.	..	..	..	Oil mill.
Chitra	.	..	..	..	First month of the Tamil year, corresponding to April-May.
Darbar (Durbar)	..	..	..	..	Executive government of a 'native' state.
Dasara (Dussera)	..	..	..	..	Ten-day festival, of which the first nine days are called 'Navaratri' or nine nights (the last day is celebrated in South India as 'Ayudhapooja' or worship of the instruments of livelihood).
Dawk (Dak)	..	..	..	..	System of postal mail.
Devadasi	..	..	..	..	Female servant of God (lit.) ; the name of girls who were 'dedicated' to Hindu shrines where, generally, they performed dances according to the tenets of Bharata's <i>nāṭya-sāstra</i> .
Devasthanam	..	..	.	..	Abode of god (lit.) ; the administrative organization of temples.
Devi	..	..	..	..	Goddess ; consorts of Hindu gods.
Gopuram	..	..	..	..	Temple-tower ; pagoda.
Grama-devatai	..	..	..	..	Local village deity.
Guru	..	..	..	..	Teacher.
Hanuman	..	..	..	..	Character in Ramayana ; a minister of Sugreeva, the monkey-chief who assisted Rama in the latter's war against Ravana.
Harikatha	..	..	..	..	Religious discourses, usually accompanied with music.
Hovila	..	..	..	..	Seat fixed on elephants' backs to hold one or more persons.
Inams	..	..	..	..	Grants of land by the State to individuals or institutions on concessional terms.
Jatka	..	..	..	..	Cart drawn by a horse.

GLOSSARY

Kalam	..	..	..	..	Time (lit.) ; any particular time or season.
Karisal	..	..	..	..	Regar soil ; of black cotton-soil, free from stones, etc.
Kavalai (Kavalaiyetram)	..	..	..	..	Leathern bucket In Tamil. 'kavalai' (கவலை) means earthen bucket and 'yetram' (ஏற்றம்) means Plcottah. In combination, 'kavalai yetram' (கவலைஏற்றம்) means a mode of lifting water from the well or pond. Water is raised in a large leathern bucket by a pair of bullocks with the help of a pulley sheave projecting over the side of a wall or stand. After the water is released, the bullocks back up again, thereby lowering the bucket to the water level for the next lift.
Kodai	..	..	..	..	Summer.
Kuravanji	..	..	..	..	A dance -drama originally enacted by women of the 'kurava' tribe, later adopted by professional dancers ; kuravanji is associated with particular places are called after the place e.g., Viralimalai-kuravanji, Kuttrala-kuravanji.
Kurinji	..	..	..	..	Hilly tract.
Mandapam	..	..	..	..	A square or rectangular pavilion, generally with flat roof, supported by pillars, open at the sides.
Man'ram	..	..	..	..	An invocatory prayer or charm.
Manyan	..	..	..	..	Grant, generally of land.
Marakkal	..	..	..	..	An old unit of measurement mainly used to grain (still in use).
Maravar	..	..	..	..	Brave men (lit.) ; derived from 'maram' (மறம்) meaning, in Tamil: bravery ; a community predominating in Ramanathapuram district.
Marudam (Marutham)	..	..	..	..	Agricultural tract.
Mudiarasu	..	..	..	..	Crown.
Mukti	..	..	..	..	Hindu concept of final beatitude ; release from the universal system of transmigration total identification with God (same as 'moksha').
Mullai	..	..	..	..	Woodland or sylvan tract.
Mumty (mumpatty)	..	..	..	..	Spade In Tamil, 'mun' (முன்) means 'earth' and 'vetti' (வெட்டி) means 'cutter' ; this instrument is, therefore, called 'mun-vetti' (முன்வெட்டி) often spelt 'mumty'. In English.
Nakshatram	..	..	..	..	Star (lit.) generally used in astrological parlance to denote stellar configuration.
Natakam	..	..	..	..	Drama.

GLOSSARY

Nattuvanar	..	..	..	Master in the art of dance.
Nayanars	..	..	..	Sixty-three special votaries of Siva, also known as 'Sivanadiyargal' or 'Aroo-patt-moover'.
Neithal	..	..	..	Maritime tract.
Nilattarasu	..	..	..	Governor of land.
Padikkaval	..	..	..	Watchmanship of village in Tamil, 'padi' (பட்டி) means a village in jungle tract and serves as a suffix in place names like Aayarpadi (அயர் பட்டி) a 'Aayar' means herdsmen and, 'padi' stands for village.
Palal	..	..	..	Arid or desert tract.
Palayakar	..	..	..	Local chieftain ; in Tamil, 'palayam' (பலையம்) means a fortified village and 'karan' (காரன்) refers to the owner or doer.
Panam (பணம்)	..	..	..	Unit of money.
Pannai	..	..	..	Farm.
Pottal	..	..	..	Unreclaimed soil ; of granular earth, free from stones, with small residue of granite and quartz.
Pratyaksham	..	..	..	Manifestation ; personal appearance.
Puja	..	..	..	Worship
Puranam	..	..	..	Ancient narratives of India, mostly religious.
Pusari (Pujari)	..	..	..	Priest in small Hindu temples.
Raga	..	..	..	One of sets of scales and melodies used as basis for improvisation in Indian Music.
Rishi	..	..	..	Sage ; one who has seen the words of revelation.
Rokkakuthagai	..	..	..	Lease which stipulates payment of rent in cash.
Sakhi	..	..	..	Friend ; a girl to another.
Sandai	..	..	..	Market-place.
Sati	..	..	..	The practice of wives joining their husband in death, by burning themselves, in the funeral pyre of their husbands ; the system was legally abolished during British rule.
Sevval	..	..	..	Soil of a light red colour, containing a considerable amount of quartz.
Shikharam	..	..	..	Pinnacle ; Tower.
Siddhanta	..	..	..	Systematized set of thoughts, principles and beliefs on a subject ; school of thought.-

GLOSSARY

Sircar (Sarkar)	Government.
Sirkele	Minister ; a title of rank amongst the Marattas.
Siva	One of the three chief deities of Hinduism associated with fury, destruction, and also benignity exclusive worshippers of 'Siva' are called 'Saivites'.
Sringara bhava	Mood or emotion of love and desire.
Sthalapuranas	Local histories of holy places or places of pilgrimage, with legendary notices.
Svarabath	Stringed instrument played with plectrum of ivory or wood.
Swadeshi	Of one's own nation.
Tai	Tenth month of the Tamil year corresponding to January-February.
Tali	'Mangala sootram' or sacred thread worn by married women.
Tannarasunadu	Self-ruling country.
Taram	Quality, grade, especially applied to classification of soils.
Tavil	A large drum, both sides of which are leather and played upon with the hands.
Thinal	A variety of millet.
Tillana	Famous Tamil tune meant to accompany and govern dance.
Tirumanjanam	Holy bath.
Tuppu-cooly	Fees for giving intelligence.
Umbalam Inam	Grant for services.
Uvar	Saline ; of saltish earth.
Varagu	Cereal grown as a dry crop.
Veippal	Soil of light greyish brown earth, lumpy, free from stones.
Vina	Stringed instrument of the kind of guitar, played with the fingers.
Vishnu	One of the three chief deities of Hinduism believed to be the god of 'protection, believers in the supremacy of Vishnu are called 'Vaishnavites'.
Yadast	Written memorandum.

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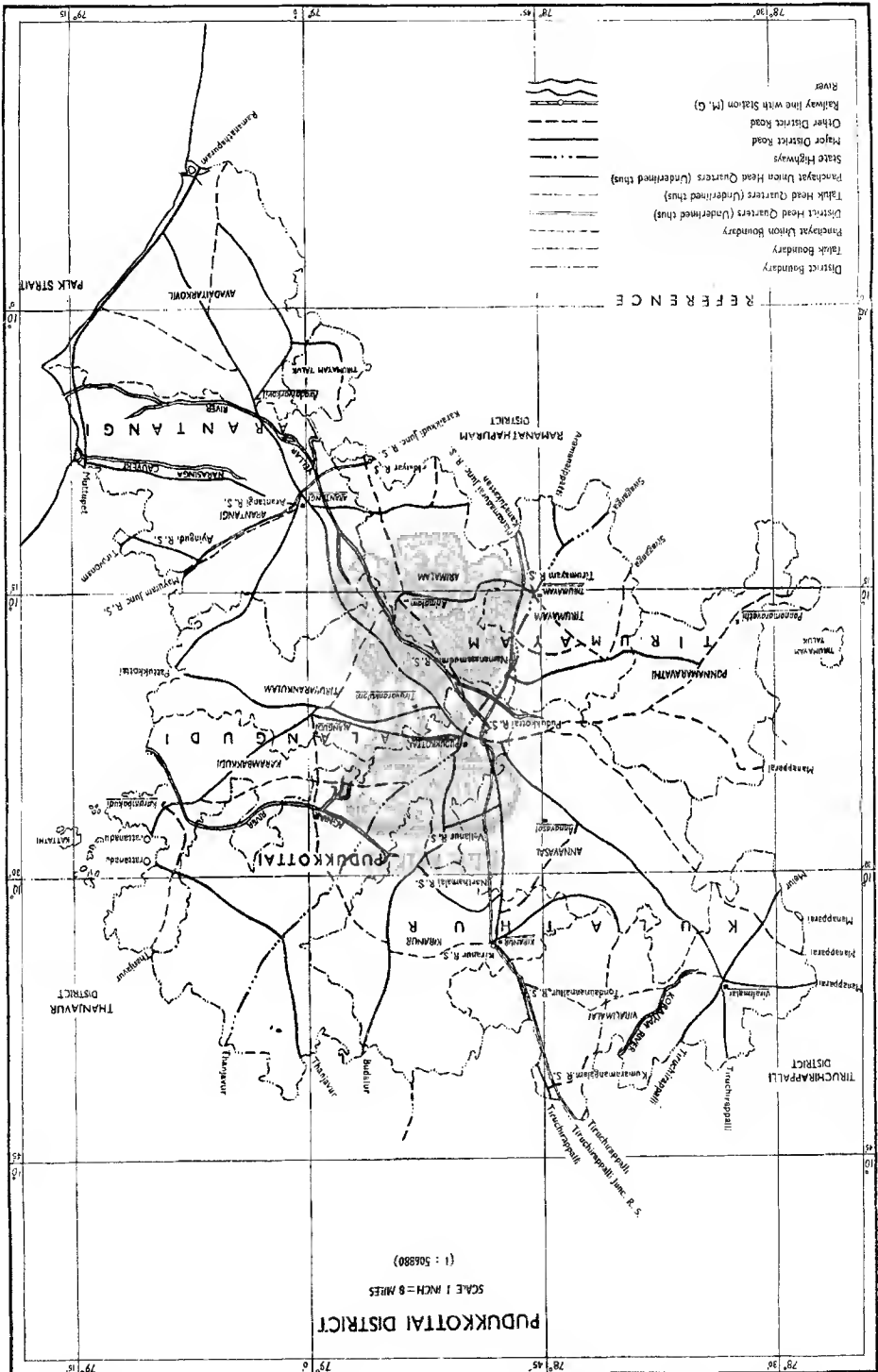
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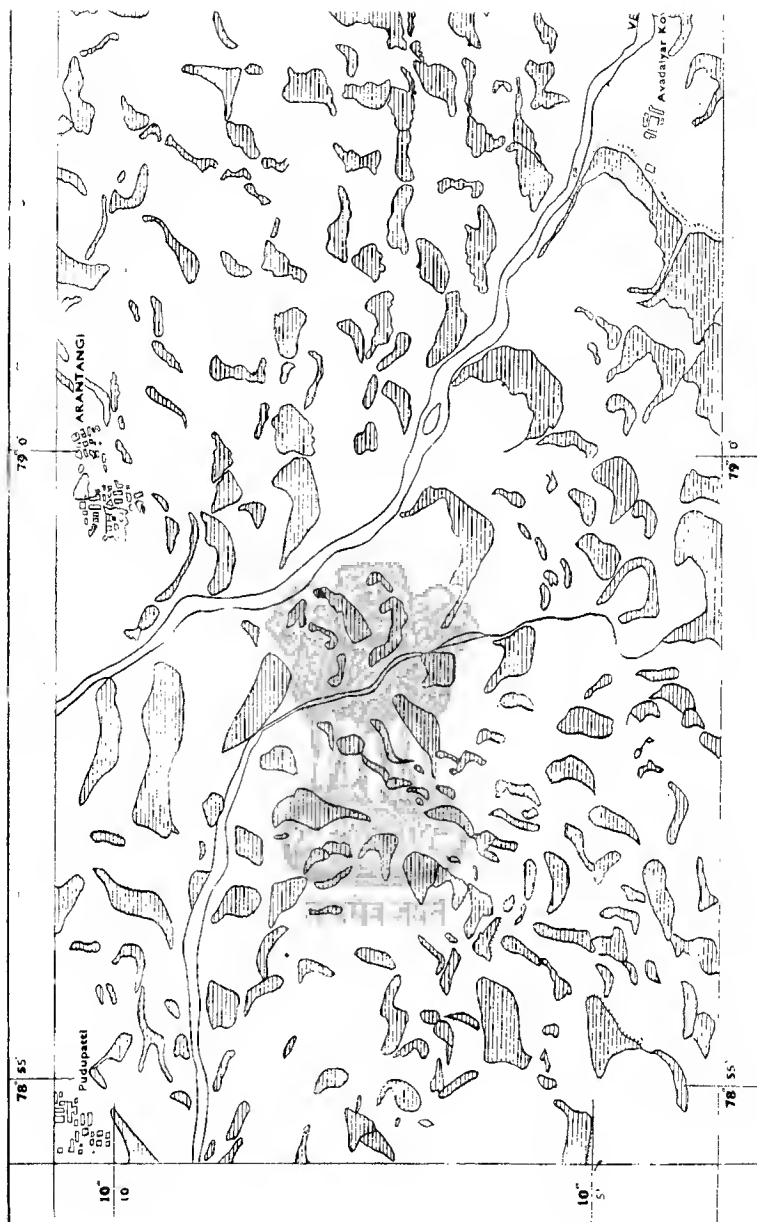
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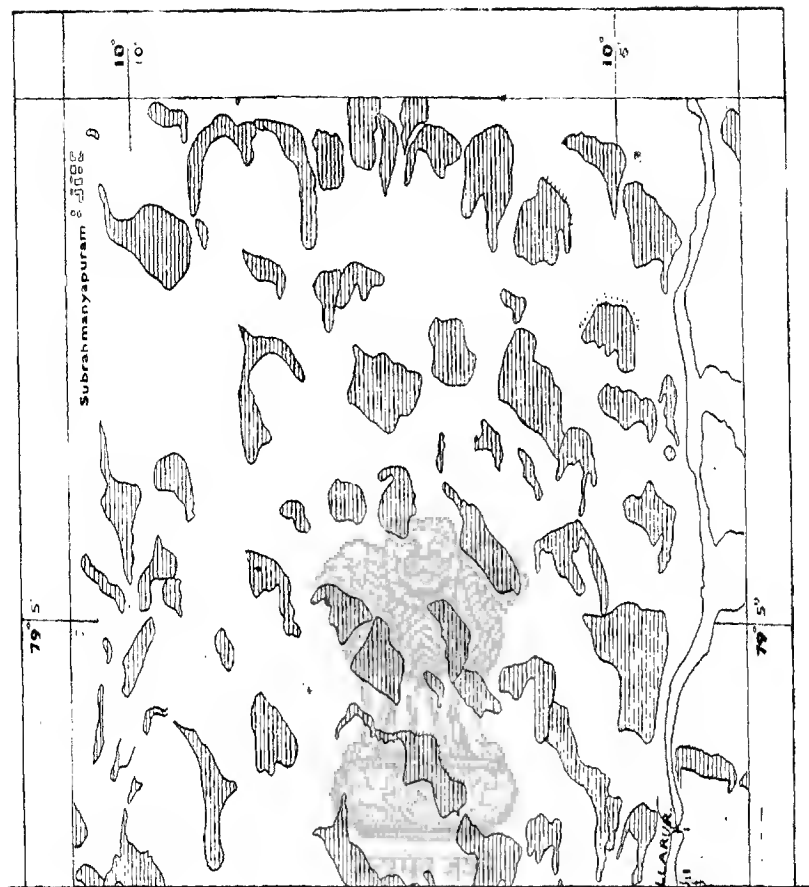
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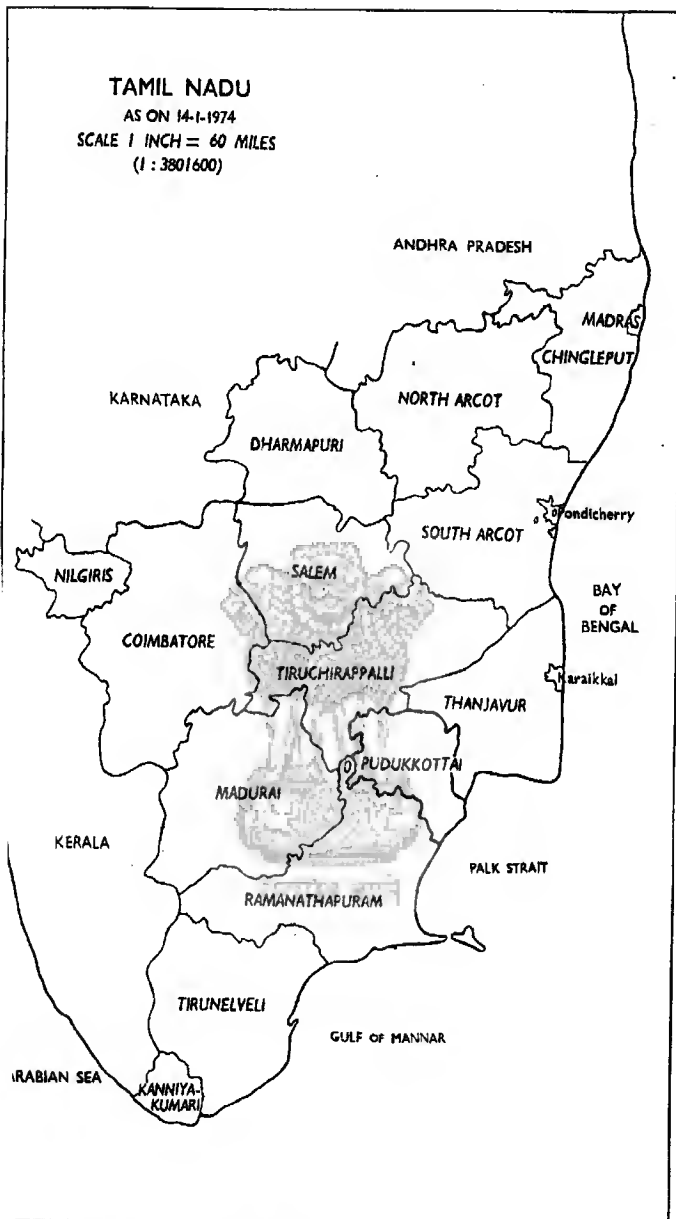
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A Sample area in Puducherry District Showing profusion of tan. (Scale 1:63,340)



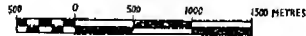


SOURCE:- Central Survey Office, Madras.

PUDUKKOTTAI TOWN

LOCATION OF

INDUSTRIES BY TYPE



REFERENCE

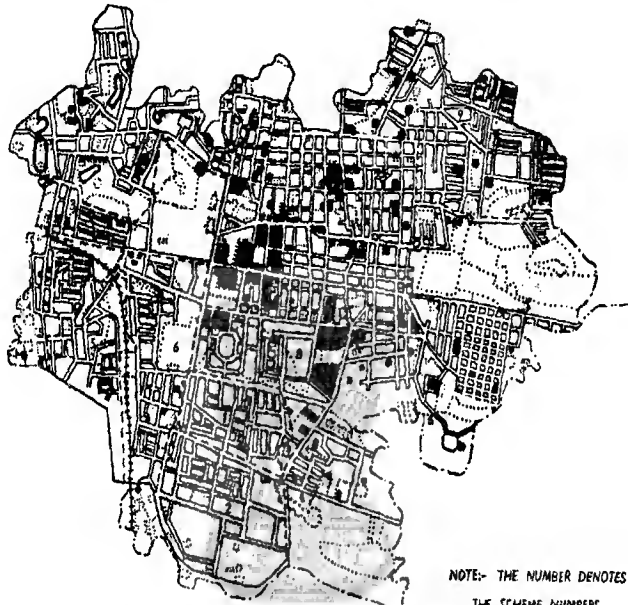
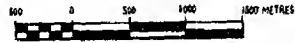
- SERVICE INDUSTRY:-** CONCERNED WITH REPAIR, MAINTENANCE
SERVICING OR JOBBING WORK.
- LIGHT INDUSTRY:-** 21 TO 100 H. P. AND 100 WORKERS. PLOT
AREA 2 ACRES
- EXTENSIVE INDUSTRY:-** EMPLOYES 100 TO 500 WORKERS PLOT
AREA 2 ACRES ANY KIND OF MOTIVE
POWER OR FUEL
- NOXIOUS INDUSTRY:-** INDUSTRIES OF NOXIOUS CHARACTER
SUCH AS LEATHER, DARNING & PROCESS
ING MANUFACTURING OF MATCHES AND
FIRE WORKS ETC

- MUNICIPAL BOUNDARY** - - - - -
- VILLAGE BOUNDARY** - - - - -
- ROADS** = = = = =
- RAILWAY LINE (METRE GAUGE)** - + - + -
- SCHEME BOUNDARY** - - - - -
- SCHEME ROADS** = = = = =
- SERVICE INDUSTRIES** ●
- LIGHT INDUSTRIES** ○
- EXTENSIVE INDUSTRIES** ◐
- NOXIOUS INDUSTRIES** ⊙

SOURCE:- MADRAS METROPOLITAN DEVELOPMENT AUTHORITY, MADRAS.

PUDUKKOTTAI TOWN

LAND USE 1973



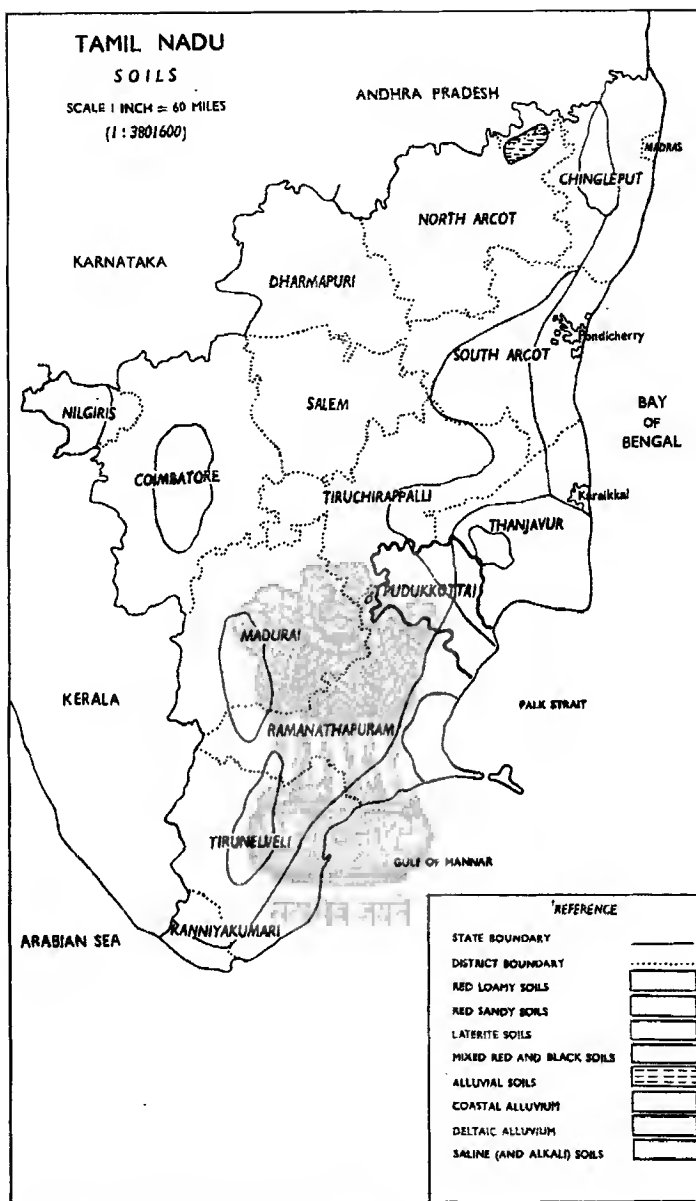
NOTE:- THE NUMBER DENOTES
THE SCHEME NUMBERS

REFERENCE

- MUNICIPAL BOUNDARY - - - - -
- VILLAGE BOUNDARY - - - - -
- ROADS = = = = =
- RAILWAY LINE (METRE GAUGE) - + - + -
- SCHEME BOUNDARY — — — — —
- SCHEME ROADS — — — — —

- RESIDENTIAL [Pattern]
- COMMERCIAL [Pattern]
- INDUSTRIAL [Pattern]
- TRANSPORTATION [Pattern]
- UTILITIES & SERVICES [Pattern]
- PUBLIC & SEMI PUBLIC [Pattern]
- PAKES, PLAY FIELDS & OPEN SPACES [Pattern]
- BURIAL GROUND [Pattern]
- VACANT [Pattern]
- AGRICULTURAL LANDS [Pattern]
- QUARRY [Pattern]
- WATER BODIES [Pattern]

SOURCE: MADRAS METROPOLITAN DEVELOPMENT AUTHORITY, MADRAS.



SOURCE:- Census of India 1961 Volume IX Madras